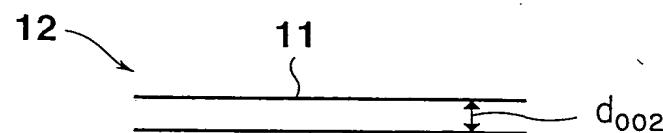


FIG. 1

(a)



(b)

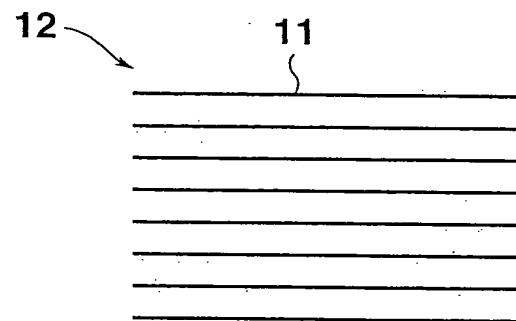
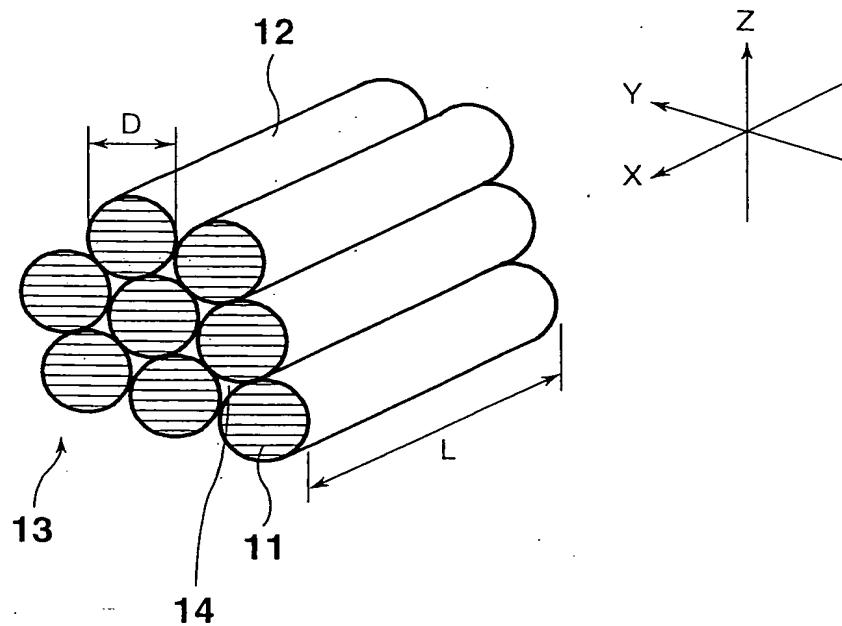


FIG. 2

(a)



(b)

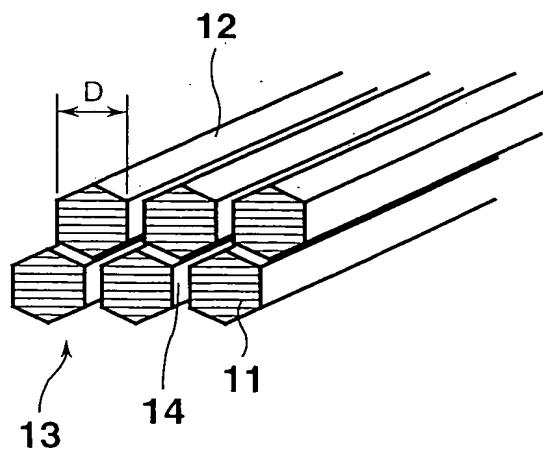


FIG. 3

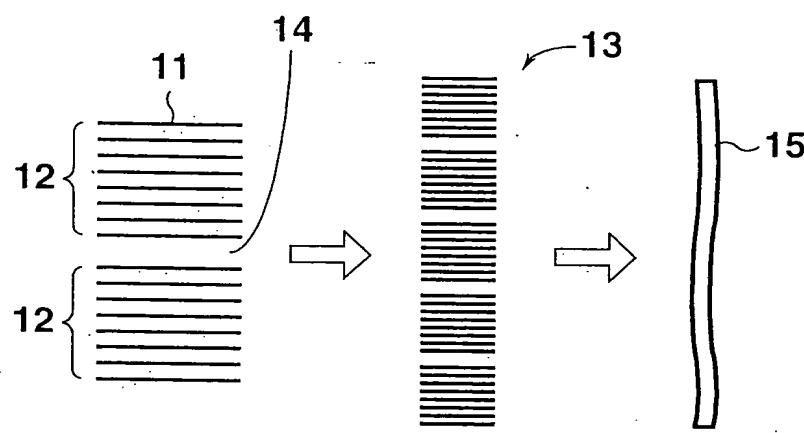


FIG. 4

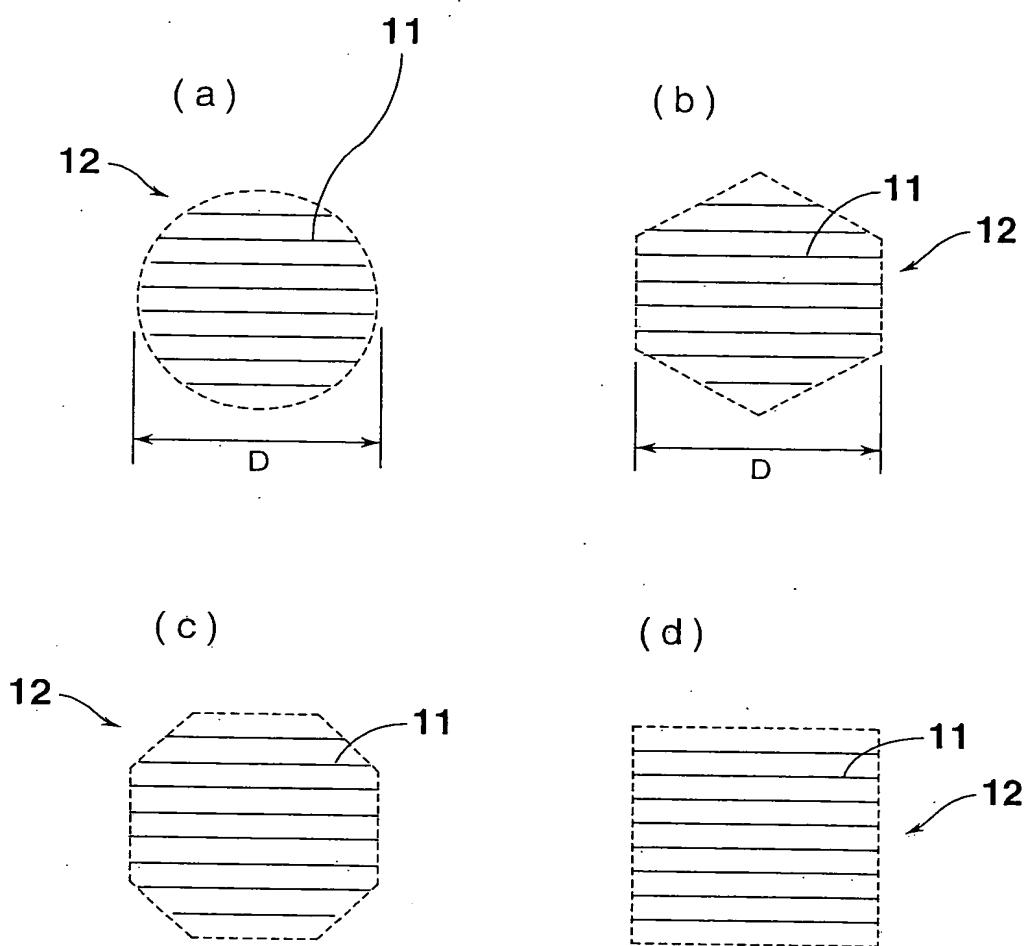


FIG. 5

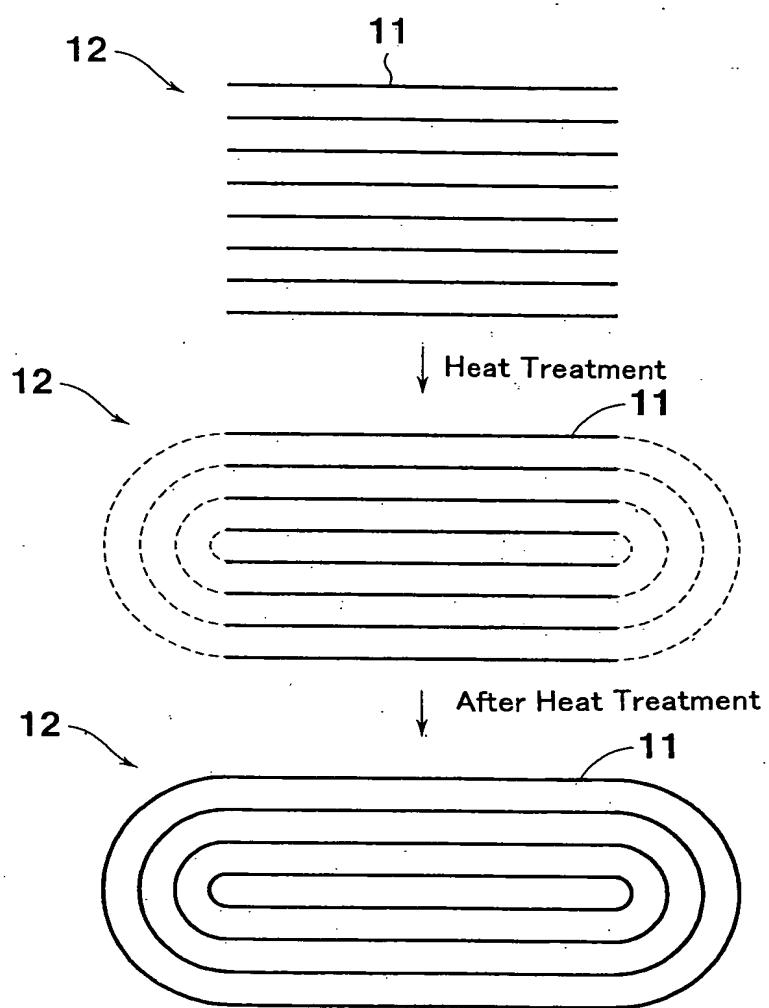
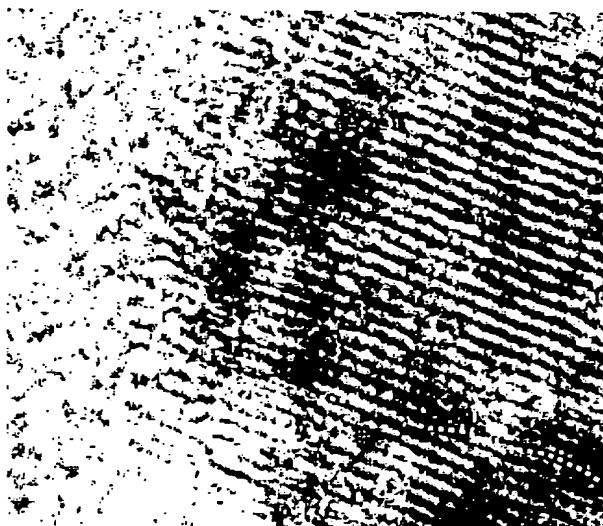


FIG. 6

High Resolution Transmission Electron Microscope
Photographs of Carbon Nano-Fibrous Rod
(a) As-Prepared State
(b) 2800° Heat-Treated State

(a)



(b)



10nm

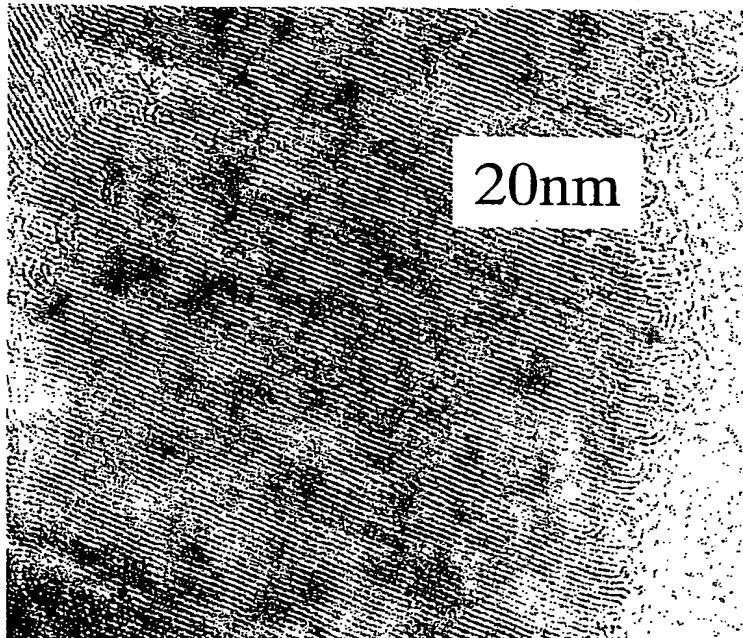
6/50

FIG. 7

High Resolution Electron Microscope Photographs of
Carbon Nano-Fibrous Rod

- (a) High Resolution Transmission Electron Microscope
Photograph
- (b) Scanning Tunneling Electron Microscope Photograph

(a)



(b)

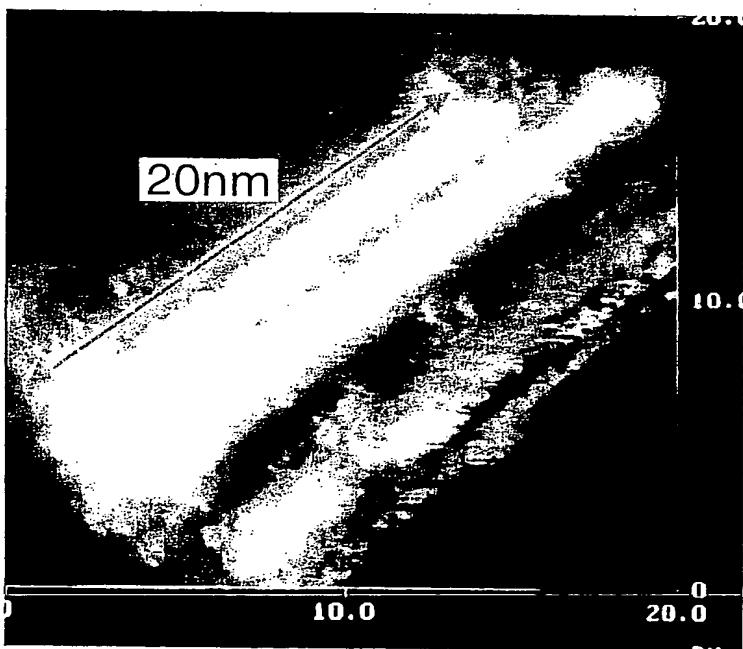


FIG. 8

Scanning Tunneling Electron Microscope Photograph of
Carbon Nano-Fibrous Rod

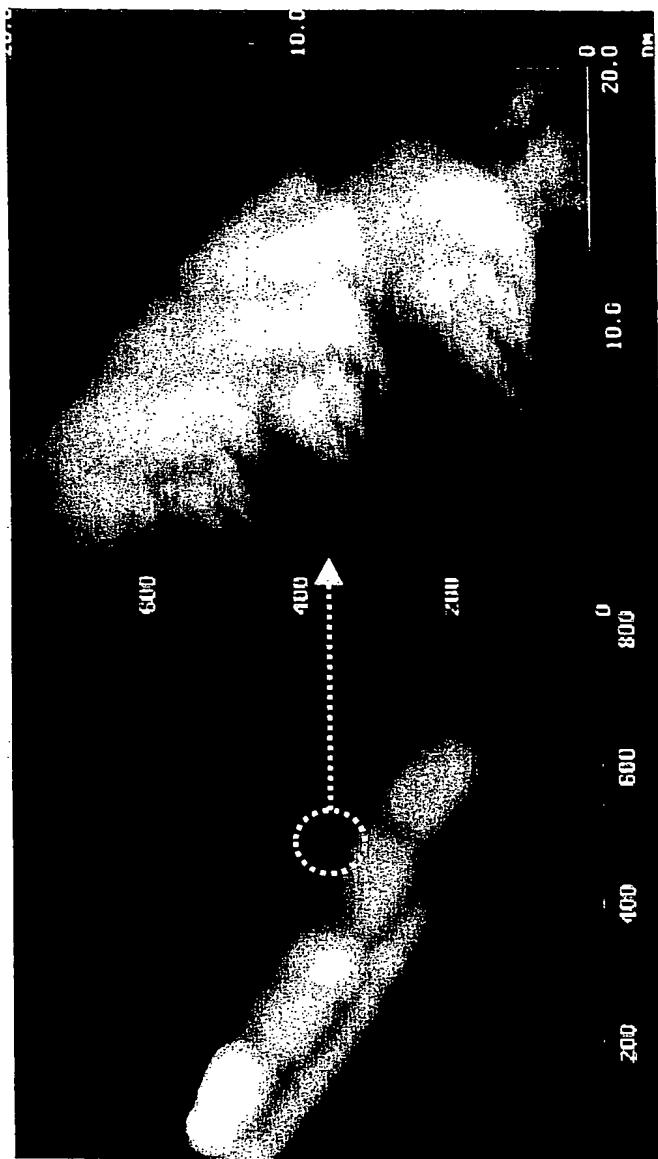


FIG. 9

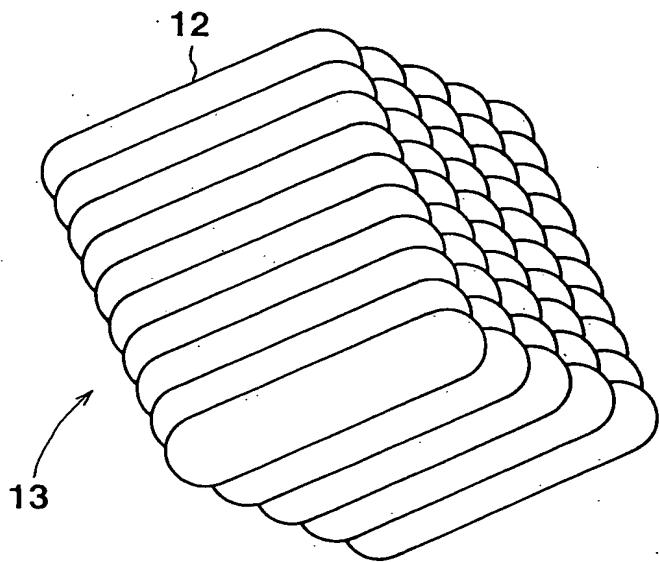
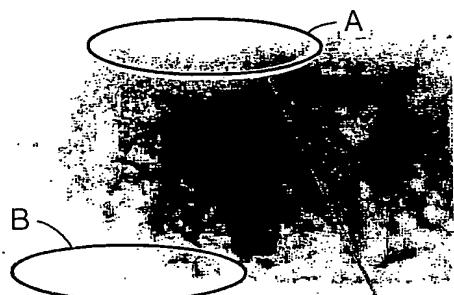


FIG. 10

High Resolution Transmission Electron Microscope
Photographs of Fibrous Nanocarbon of Columnar Structure

(a)



100 nm
x 50,000

(b)

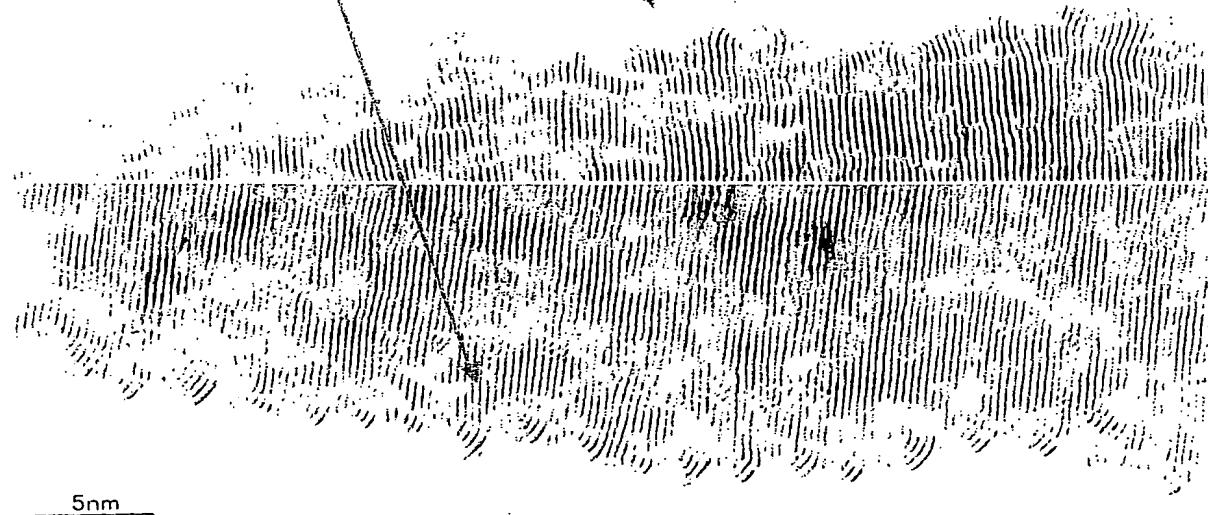
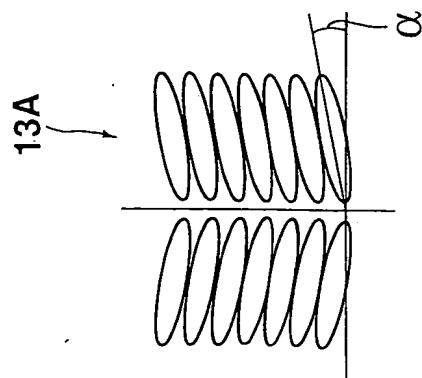
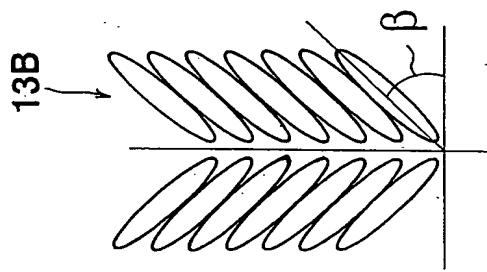


FIG. 11

(a)



(b)



(c)

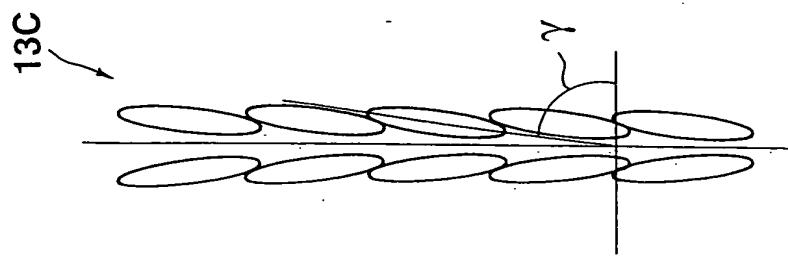


FIG. 12

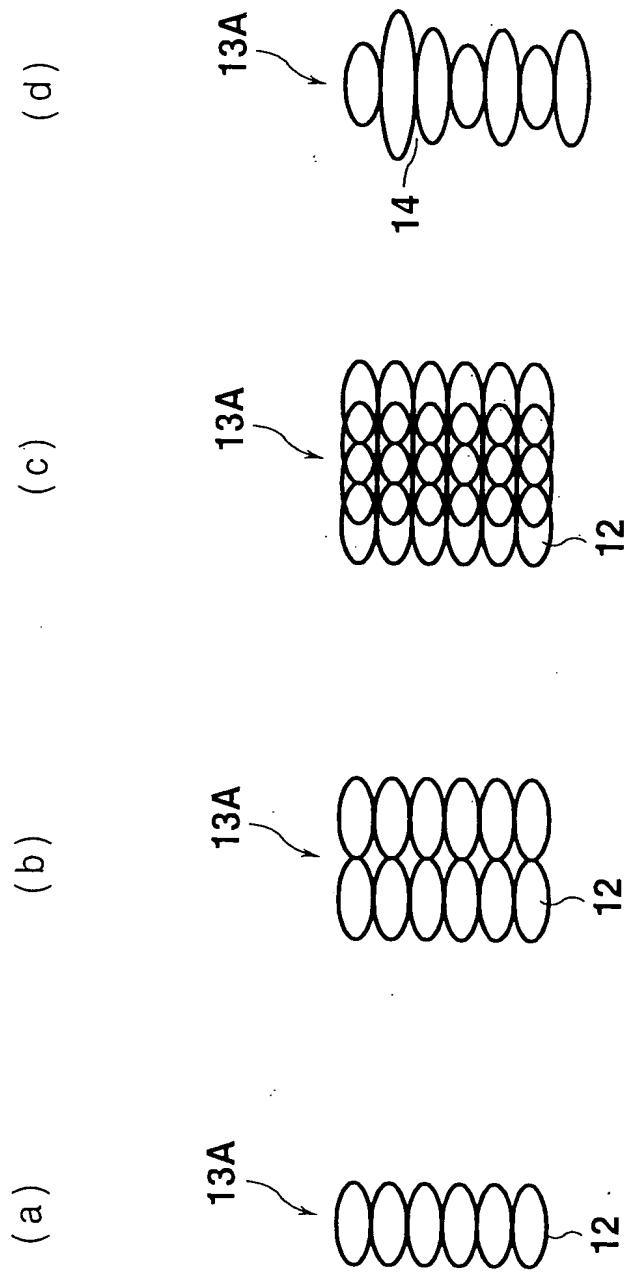


FIG. 13

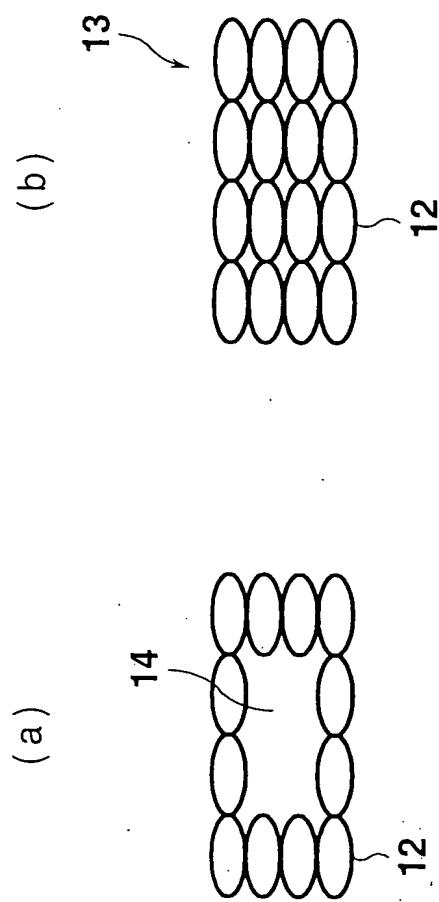
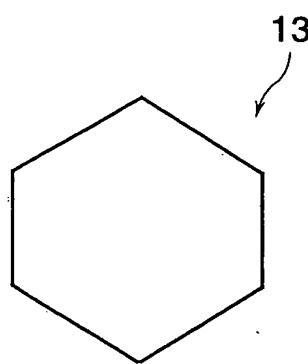
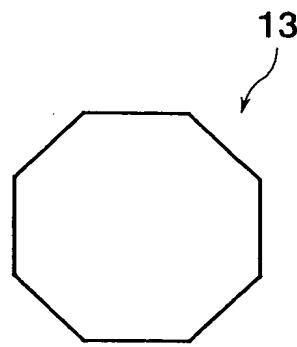


FIG. 14

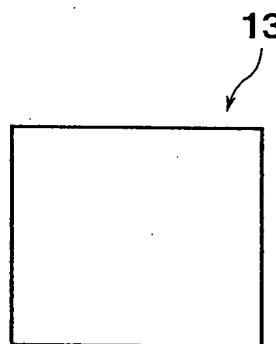
(a)



(b)



(c)



(d)

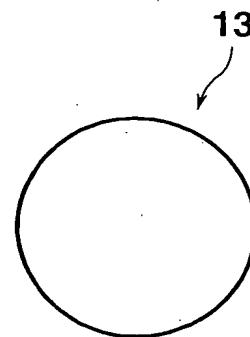


FIG. 15

High Resolution Scanning Electron Microscope
Photographs of Fibrous Nanocarbon

- (a) Fibrous Nanocarbon of Columnar Structure
- (b) Fibrous Nanocarbon of Feather Structure
- (c) Fibrous Nanocarbon of Tubular Structure

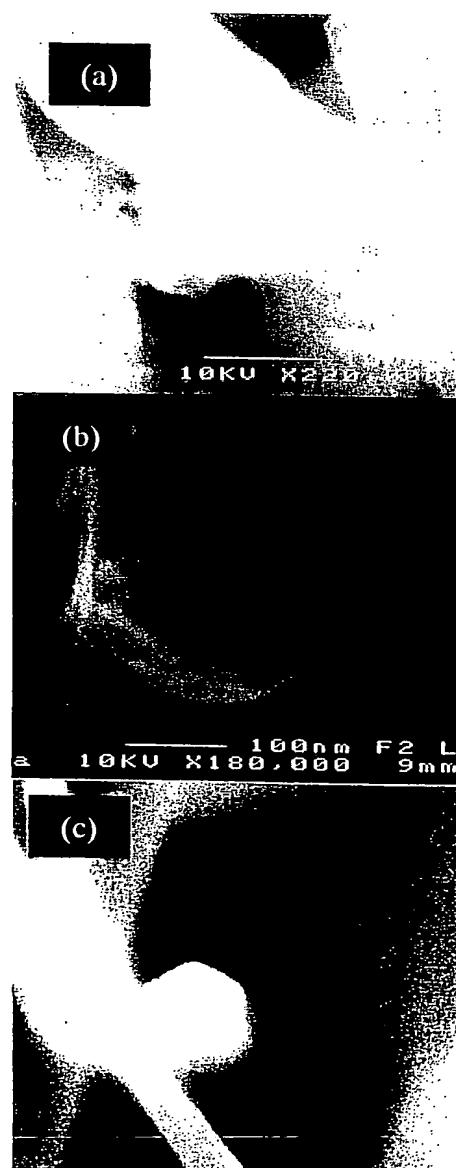


FIG. 16

High Resolution Scanning Electron Microscope
Photographs of Fibrous Nanocarbon
(a) Fibrous Nanocarbon of Columnar Structure
(b) Fibrous Nanocarbon of Feather Structure
(c) Fibrous Nanocarbon of Tubular Structure

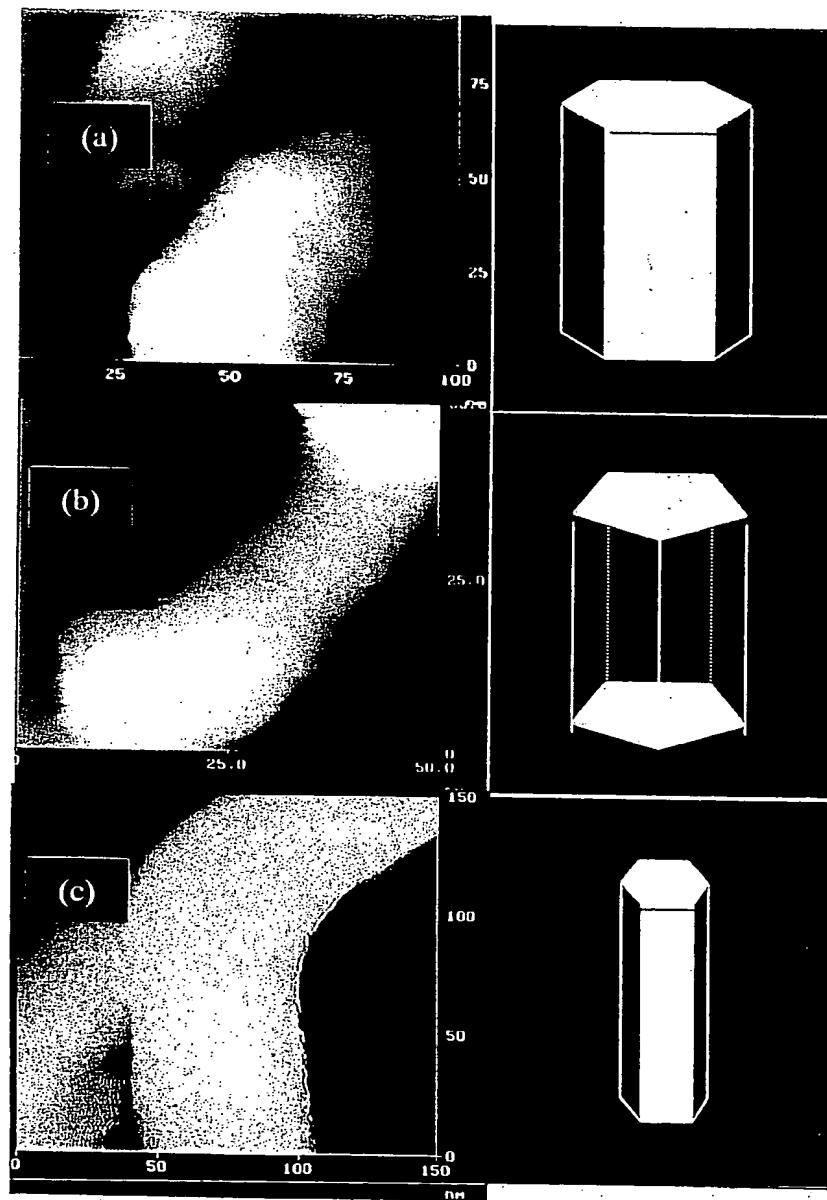


FIG. 17

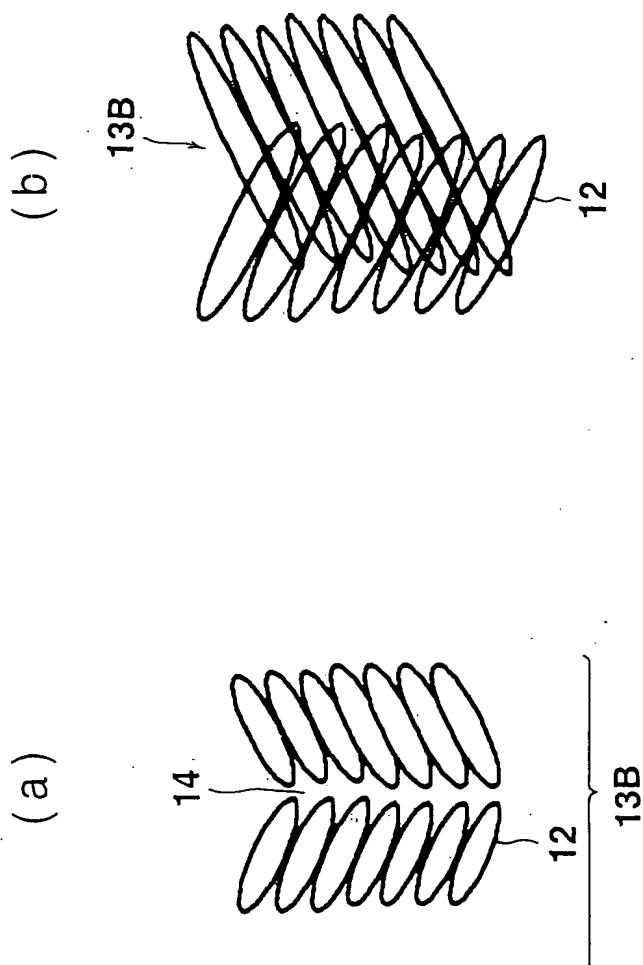
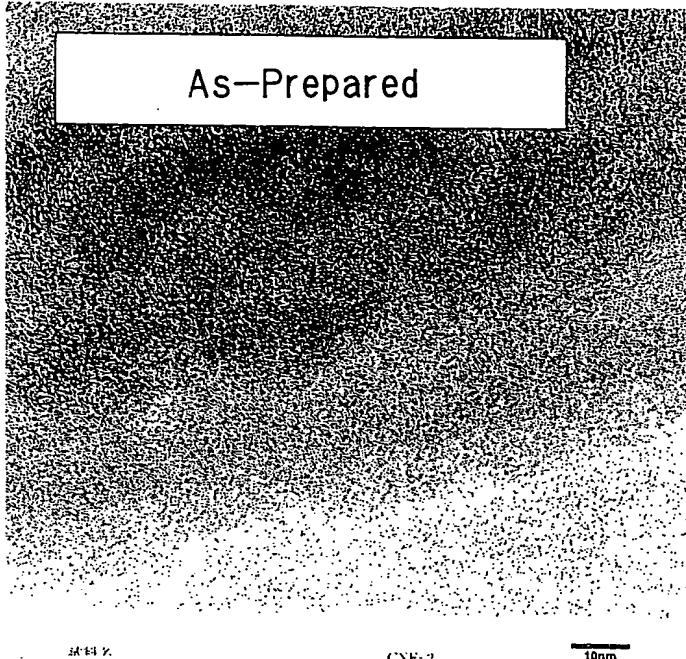


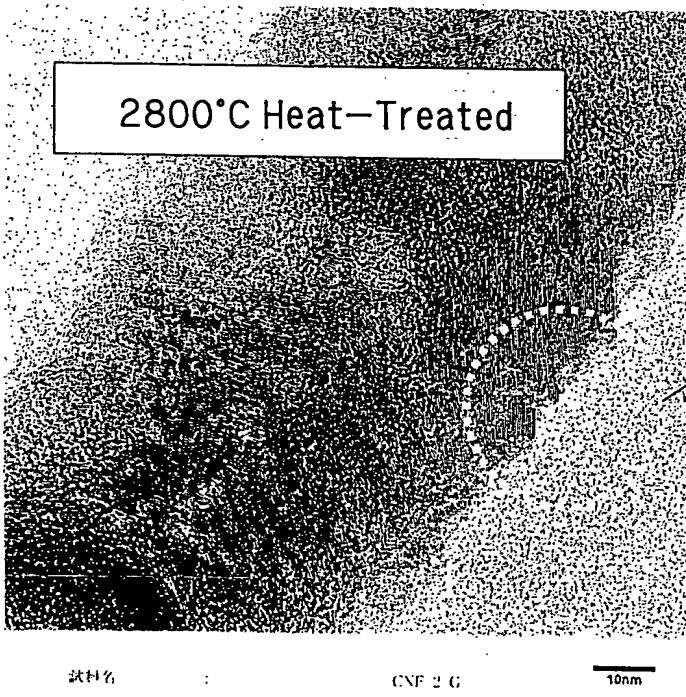
FIG. 18

High Resolution Transmission Electron Microscope
Photographs of Fibrous Nanocarbon of Feather Structure

(a)



(b)



(c)

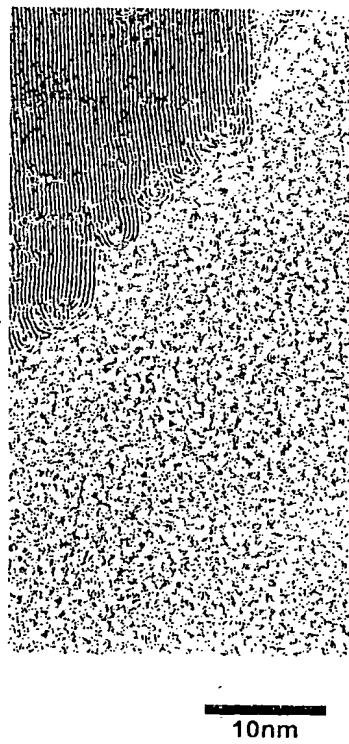


FIG. 19

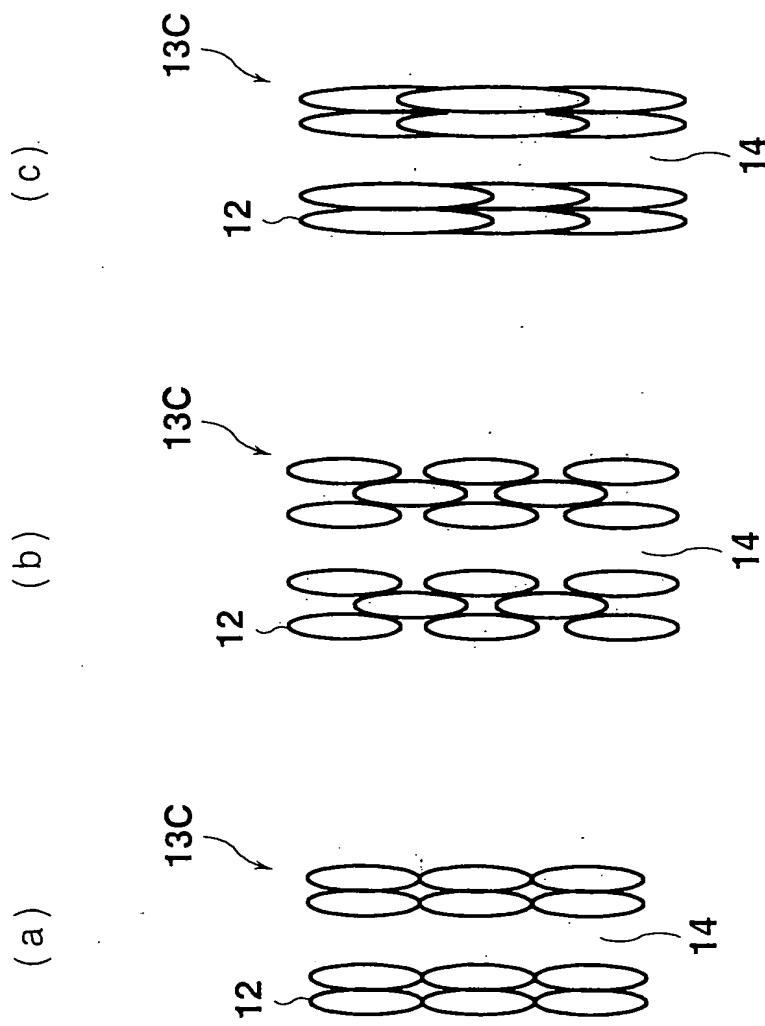


FIG. 20

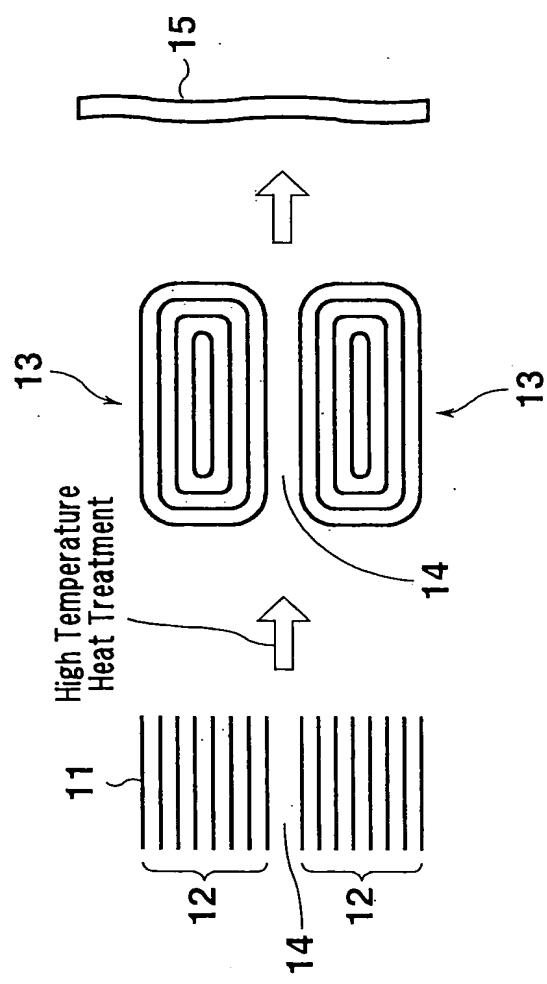
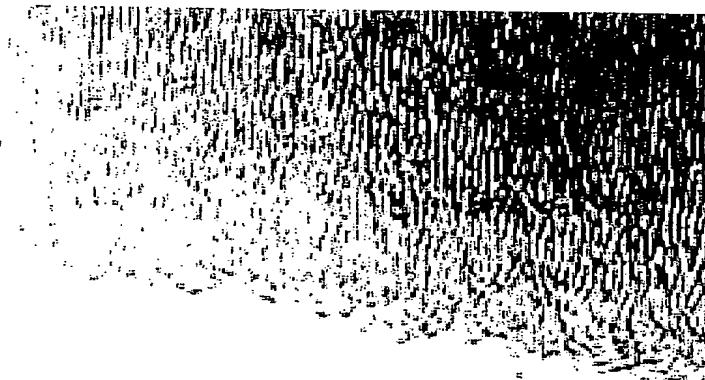


FIG. 21

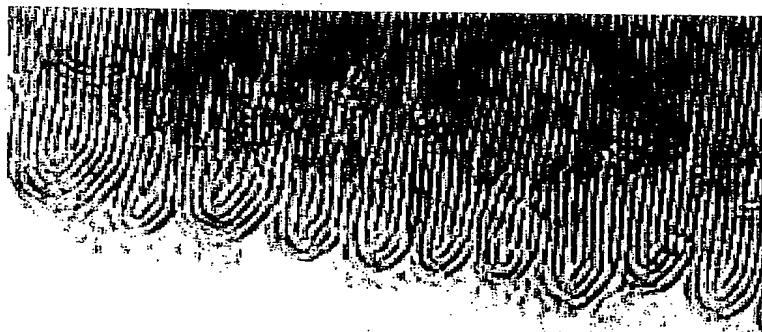
High Resolution Transmission Electron Microscope
Photographs of Fibrous Nanocarbon of Columnar Structure

(a)



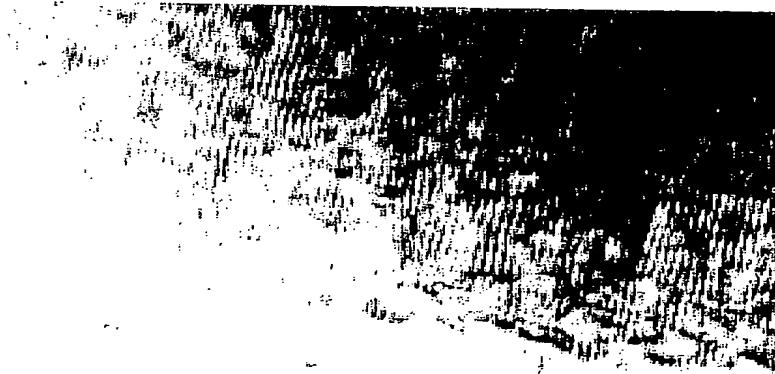
(-30 Degrees)

(b)



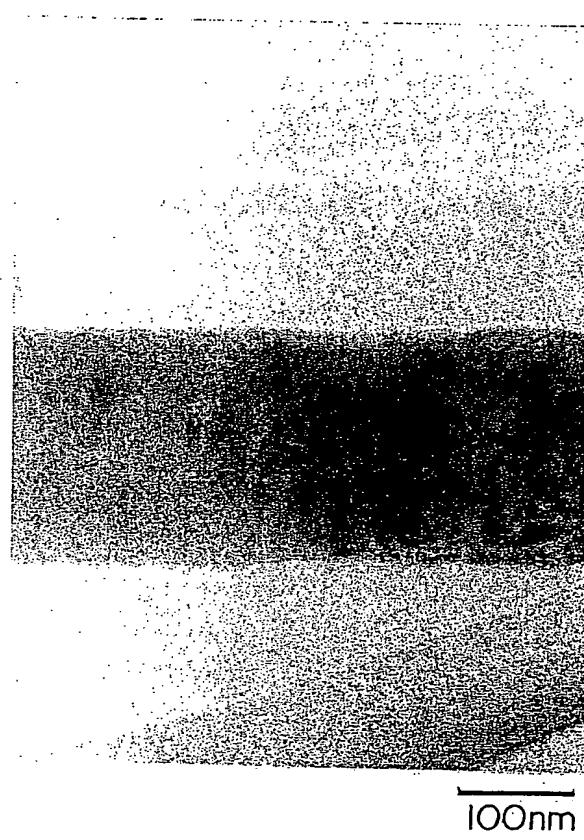
(0 Degrees)

(c)



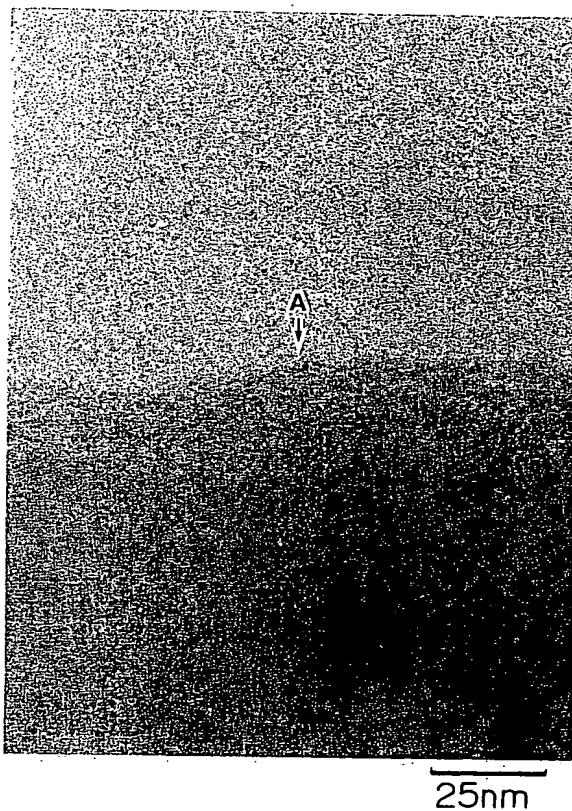
(+30 Degrees)

FIG. 22



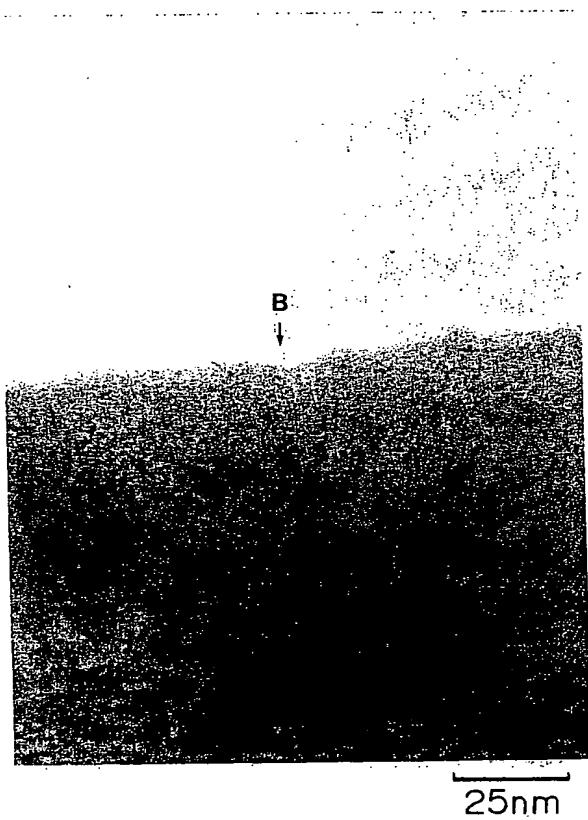
10/537151

FIG. 23



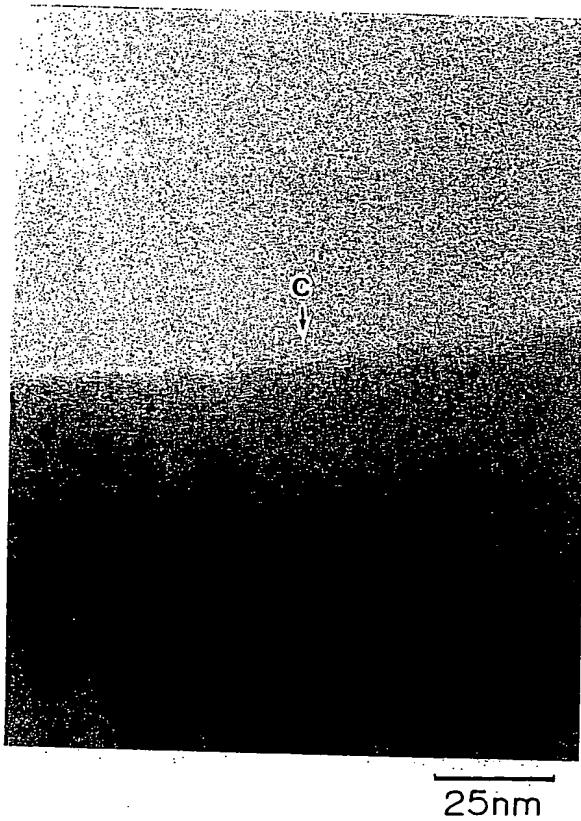
10/537151

FIG. 24



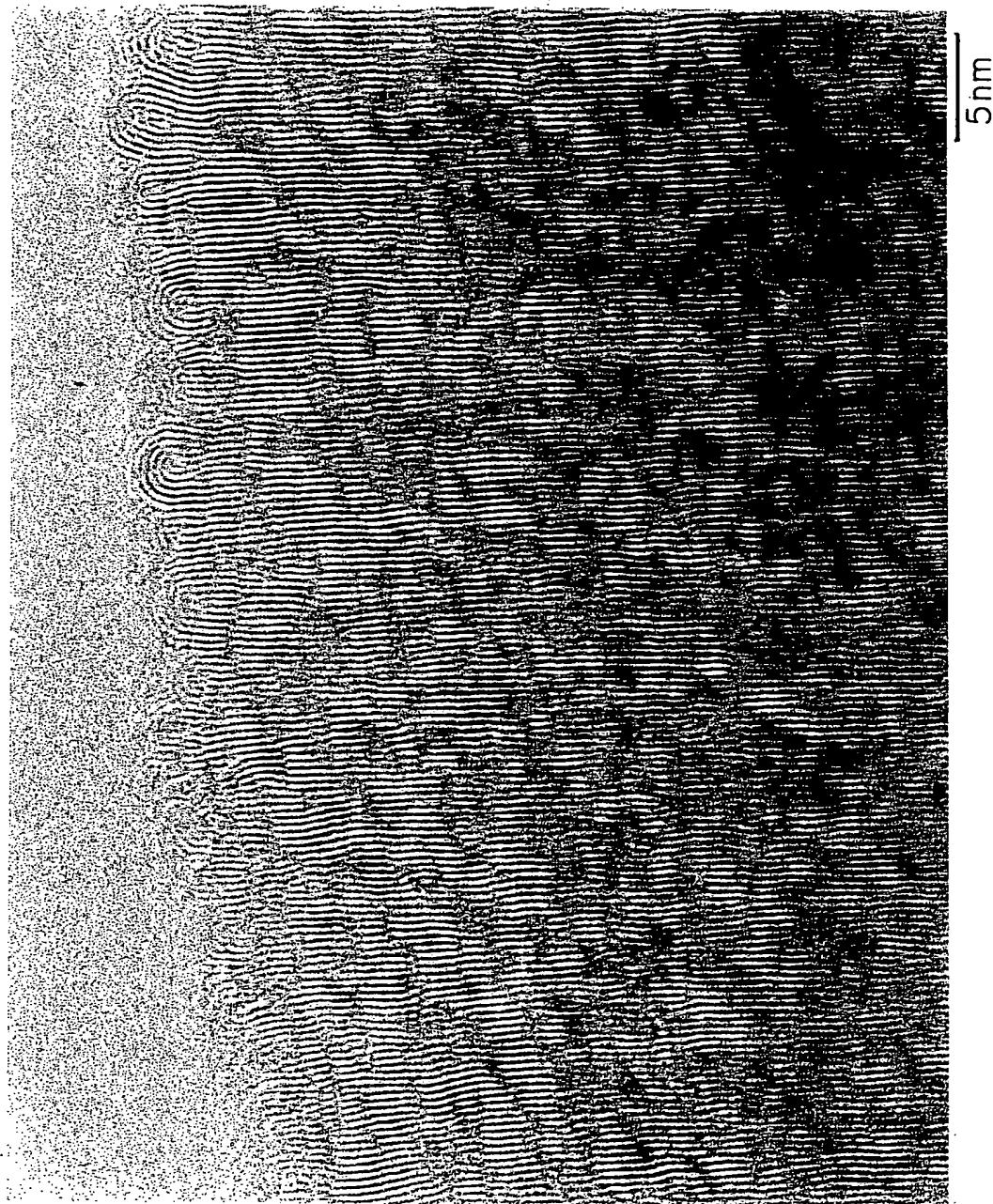
10/537151

FIG. 25



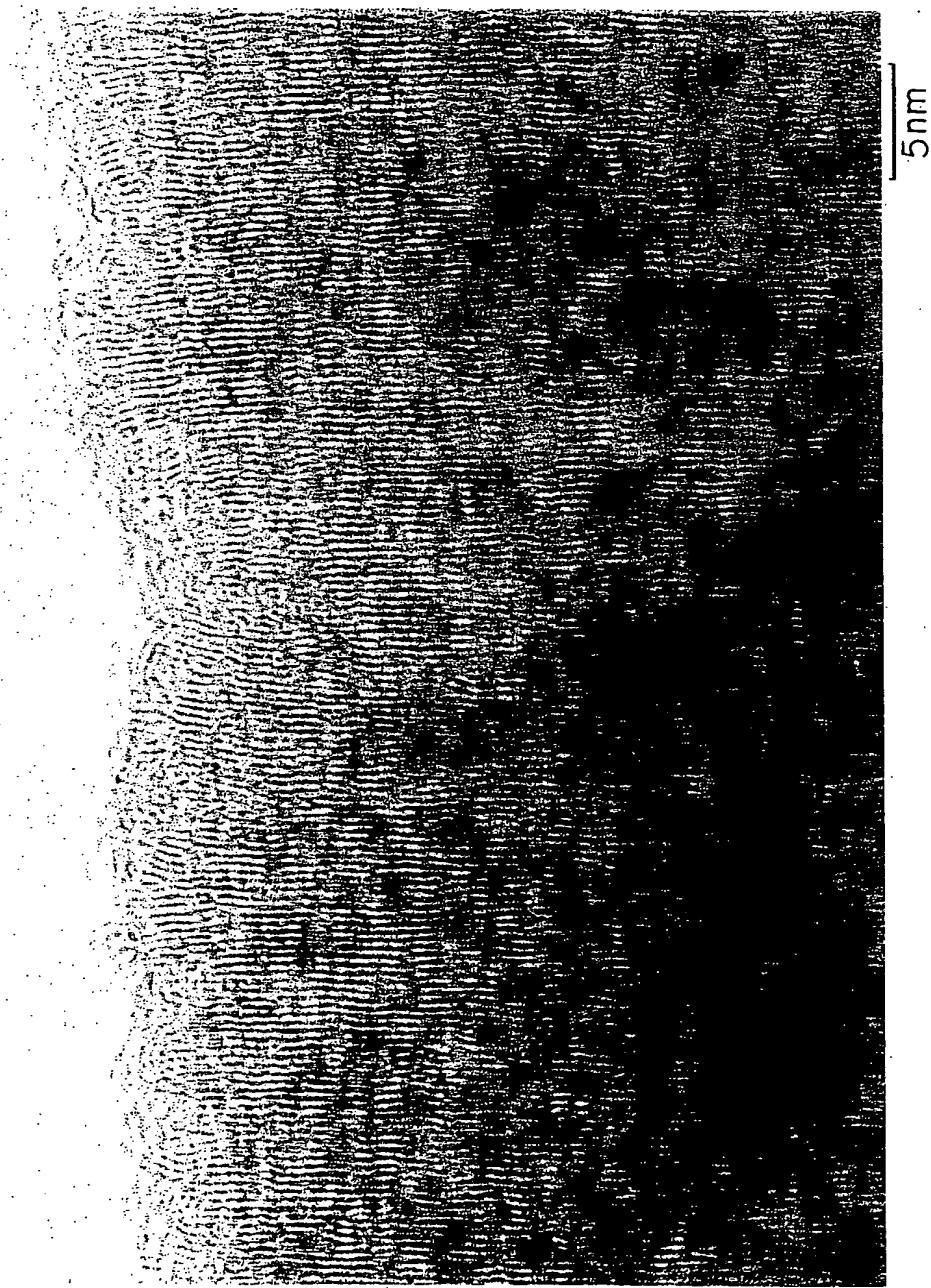
25/50

FIG. 26



10/537151

FIG. 27



10/537151

FIG. 28

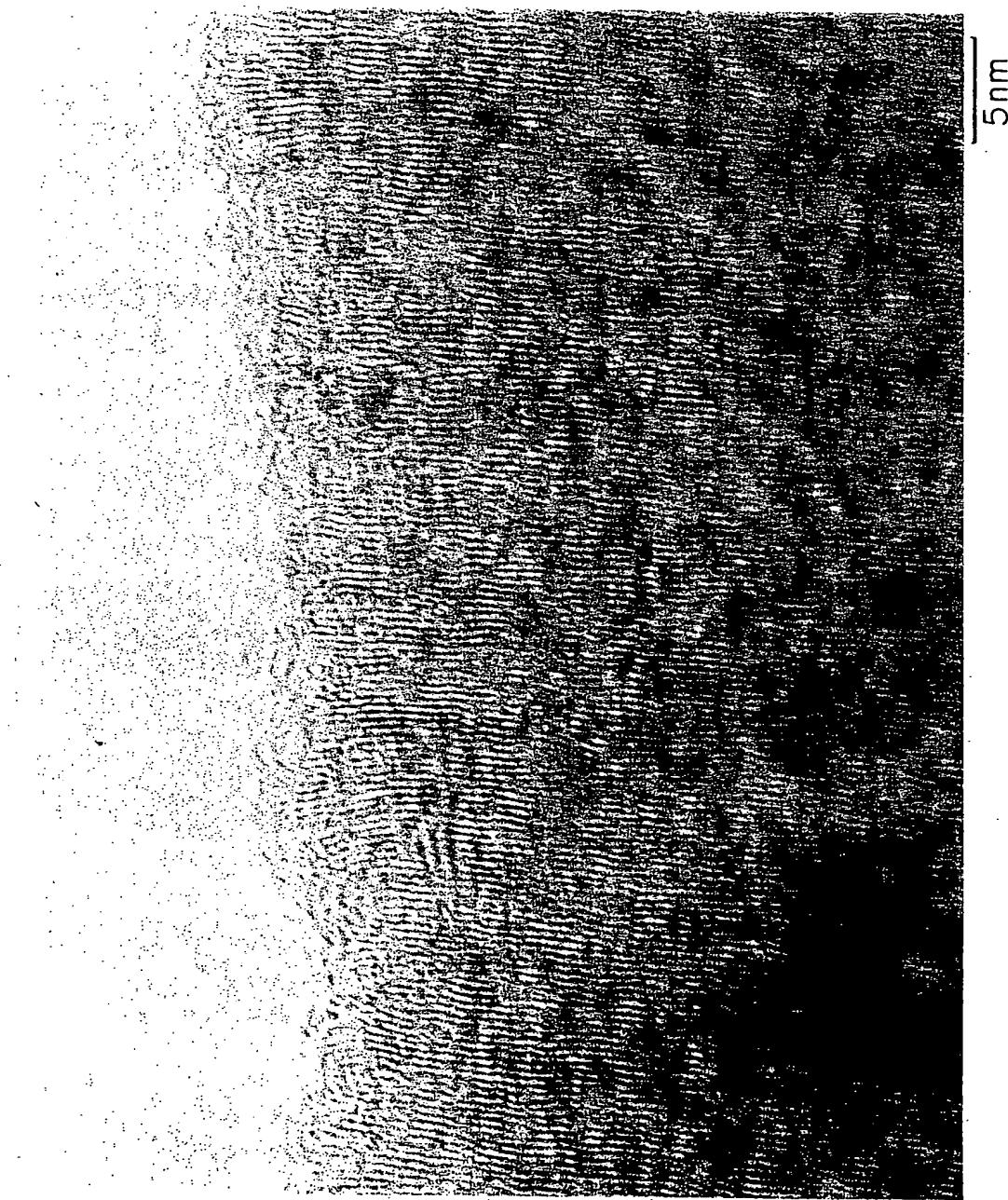


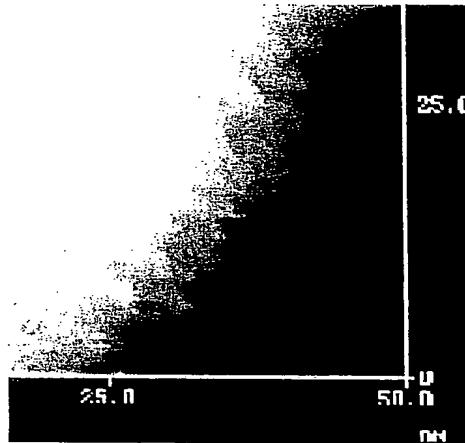
FIG. 29

High Resolution Scanning Electron Microscope
Photographs of Fibrous Nanocarbon

- (a) Fibrous Nanocarbon of Columnar Structure
- (b) Fibrous Nanocarbon of Feather Structure
- (c) Fibrous Nanocarbon of Tubular Structure

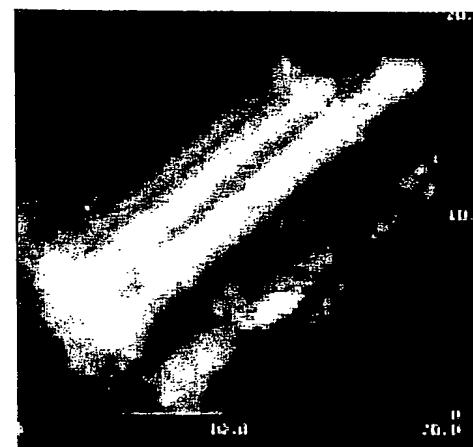
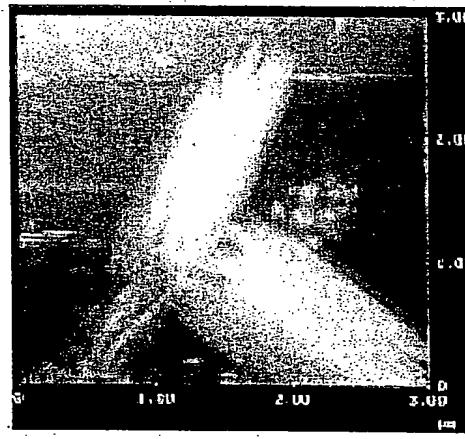
As-prepared

(a)



2800°C heat-treated

(b)



(c)

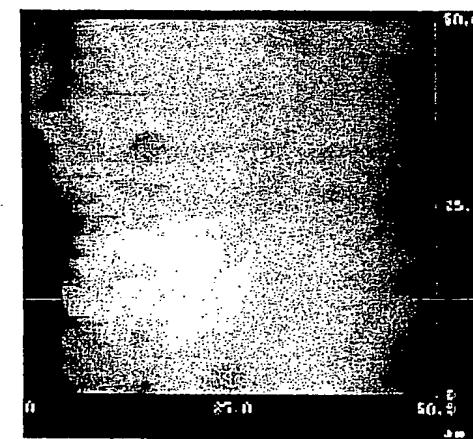
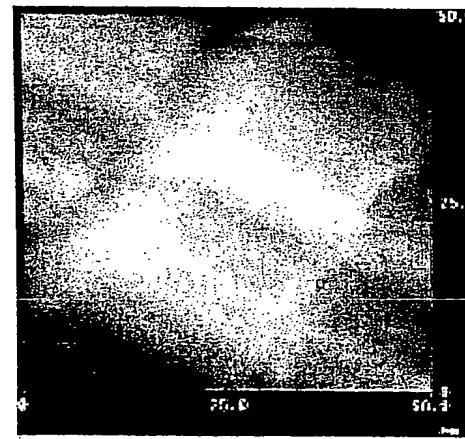


FIG. 30

High Resolution Transmission Electron Microscope
Photographs and Raman Spectra of Fibrous Nanocarbon

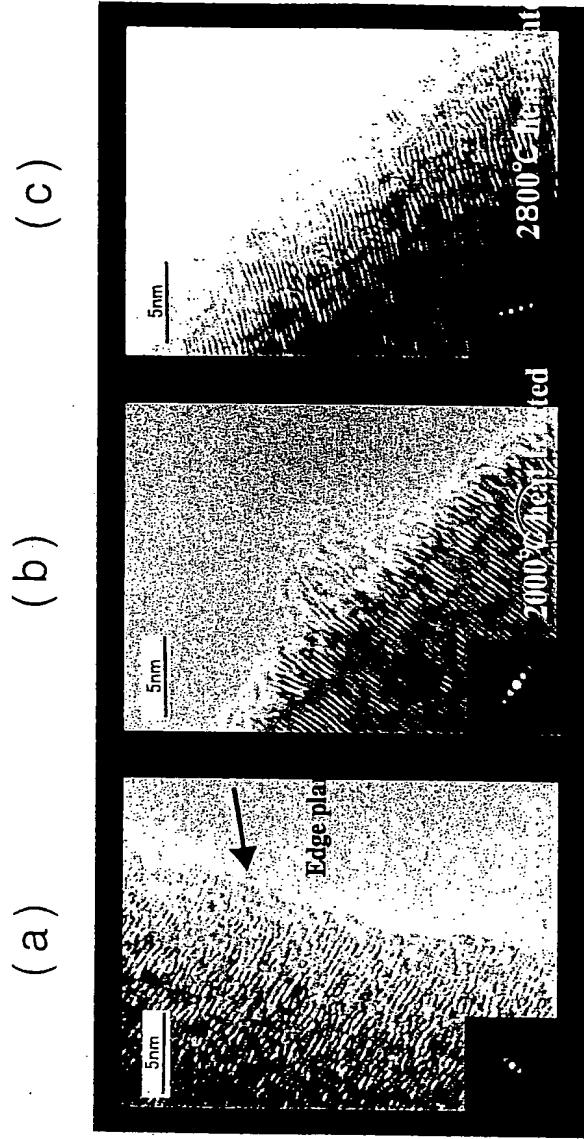


FIG. 31

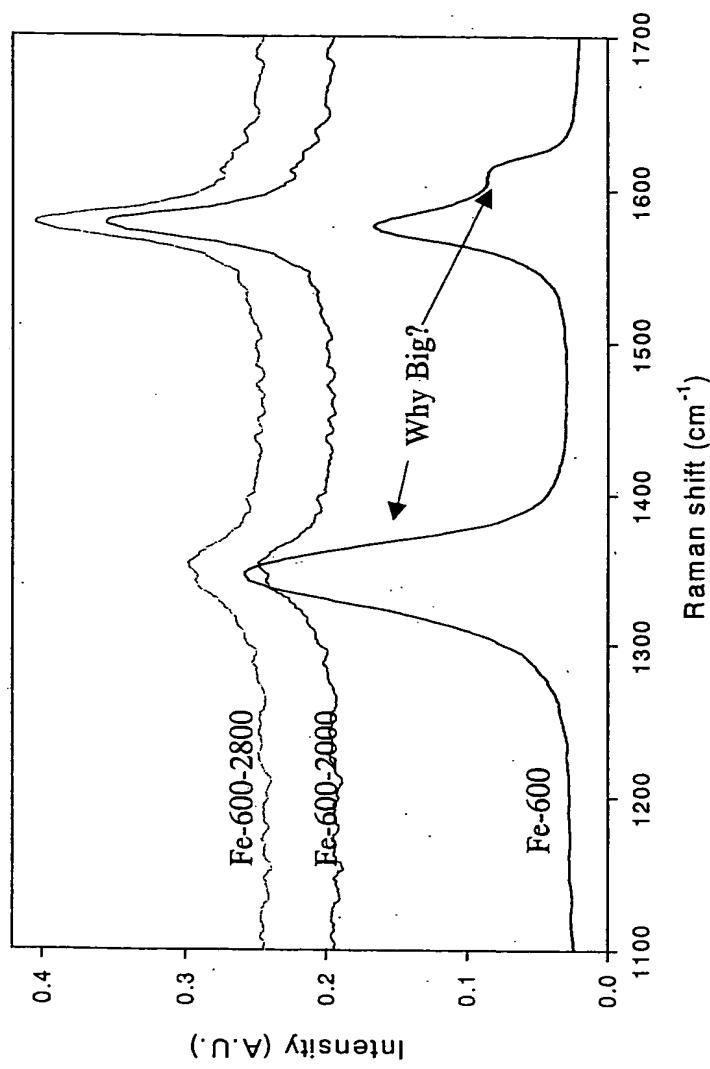


FIG. 32

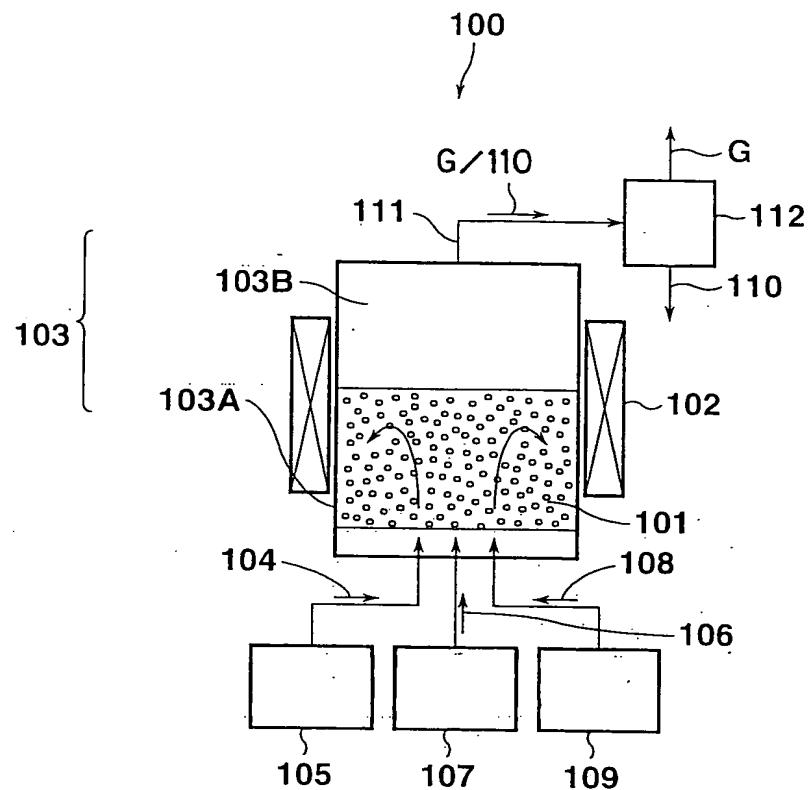


FIG. 33

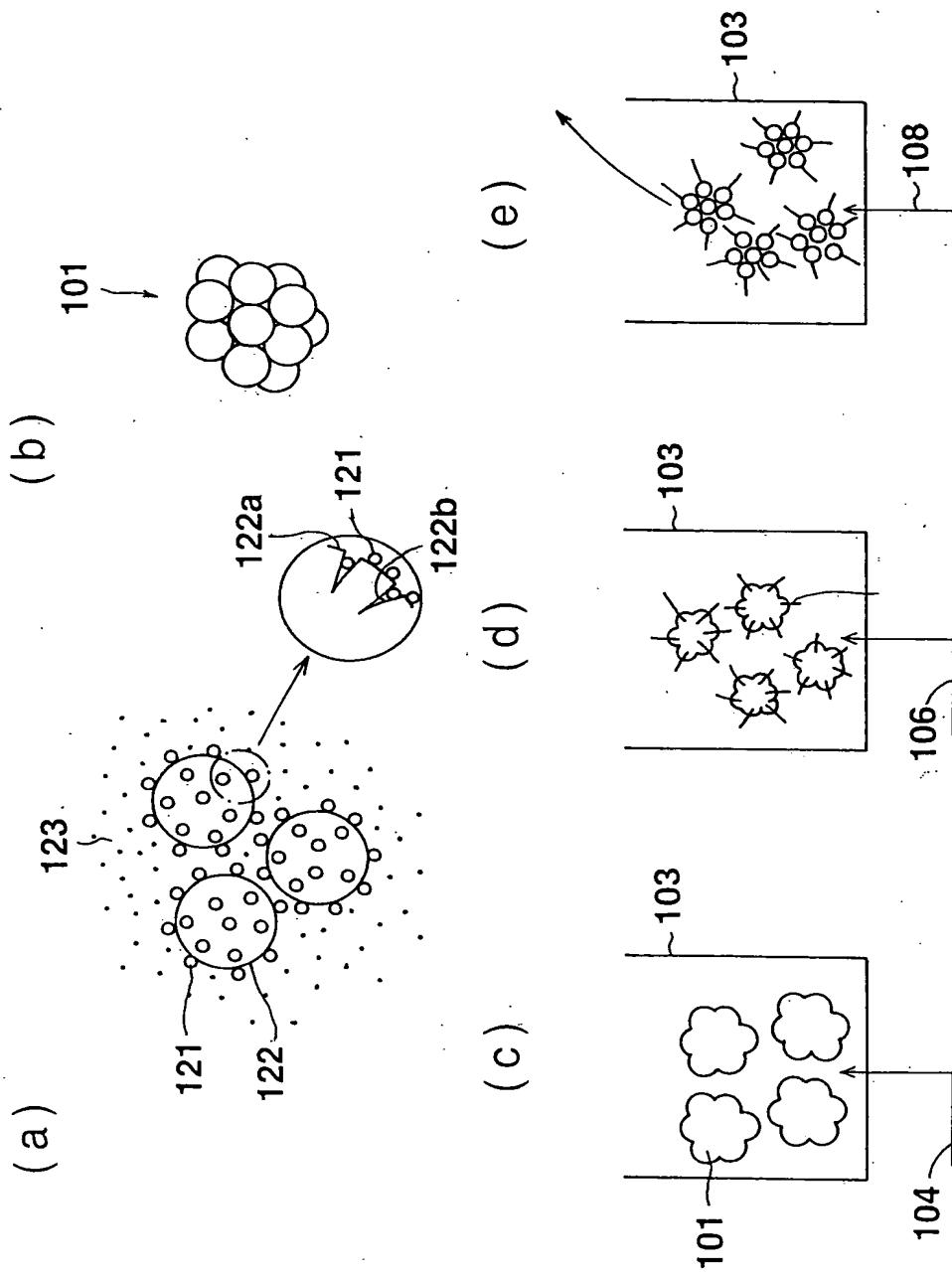


FIG. 34

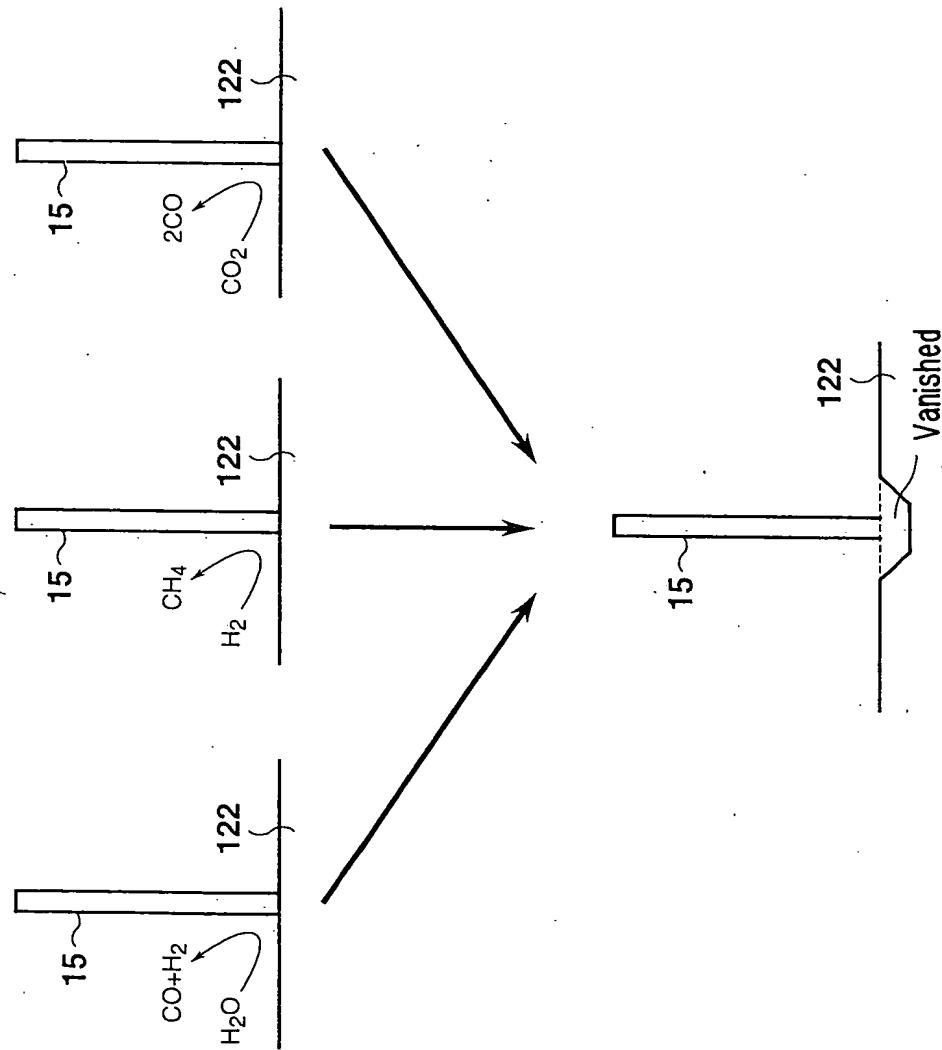


FIG. 35

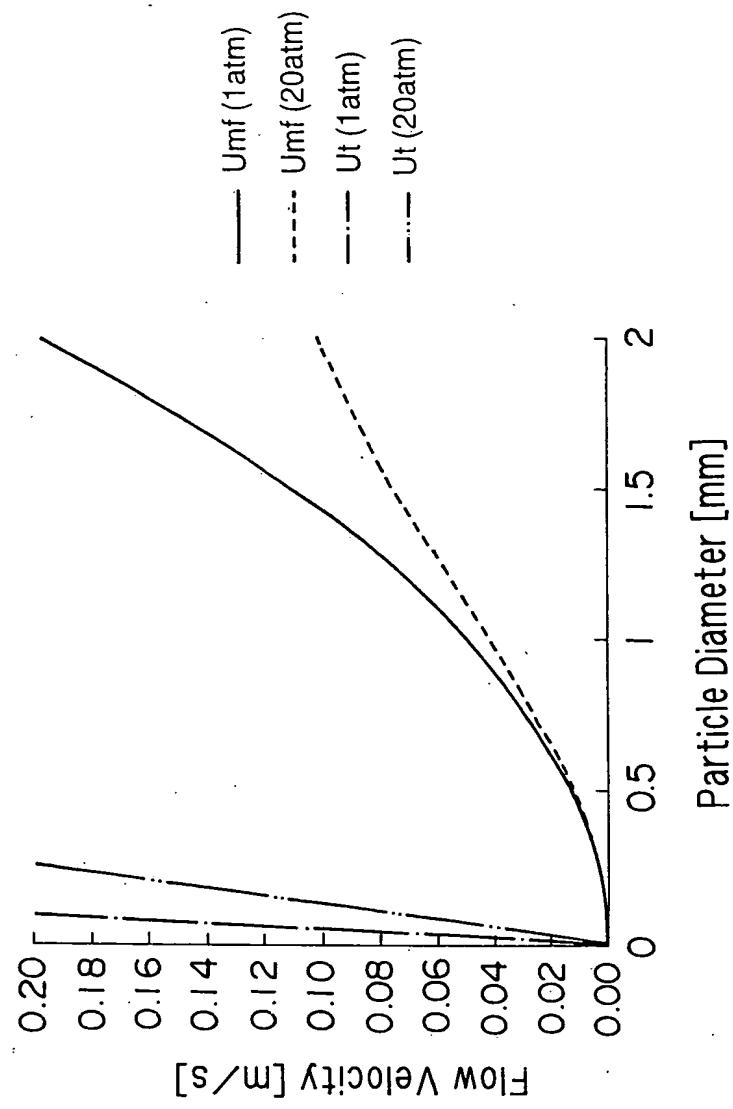


FIG. 36

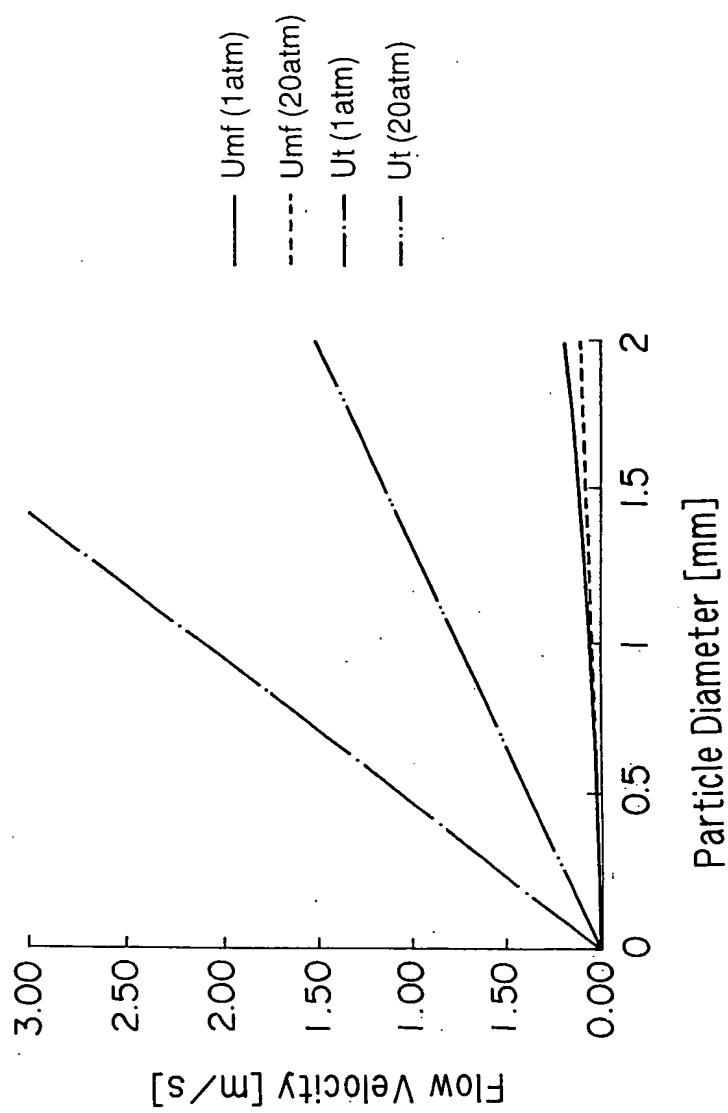


FIG. 37

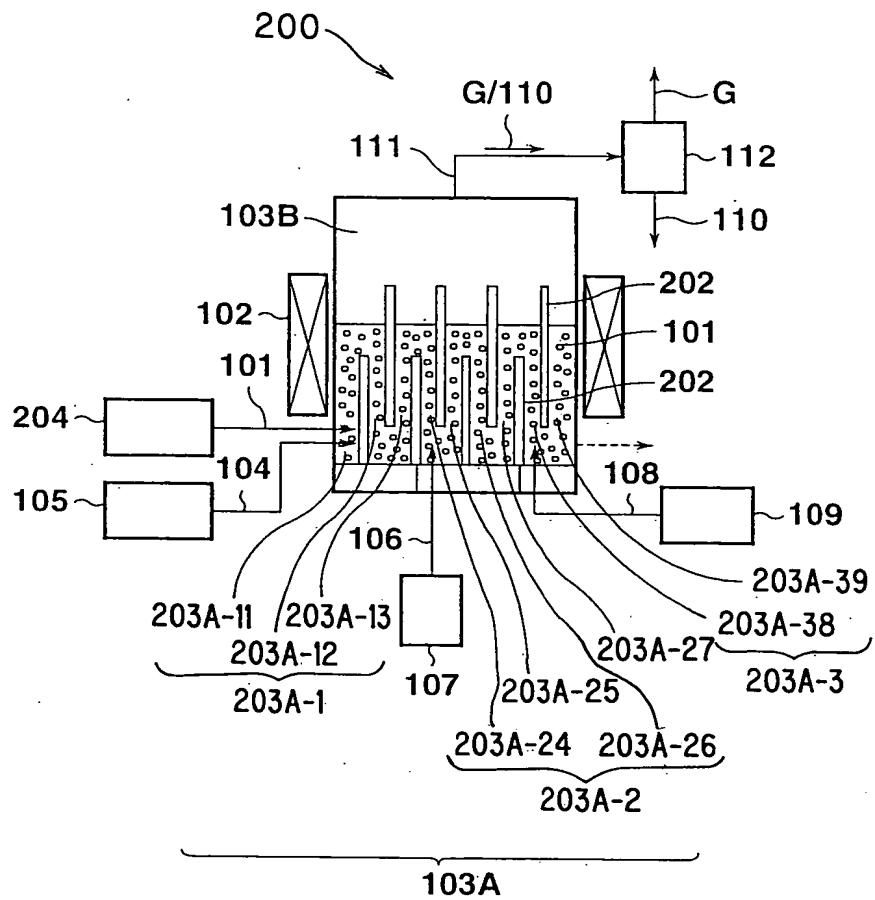


FIG. 38

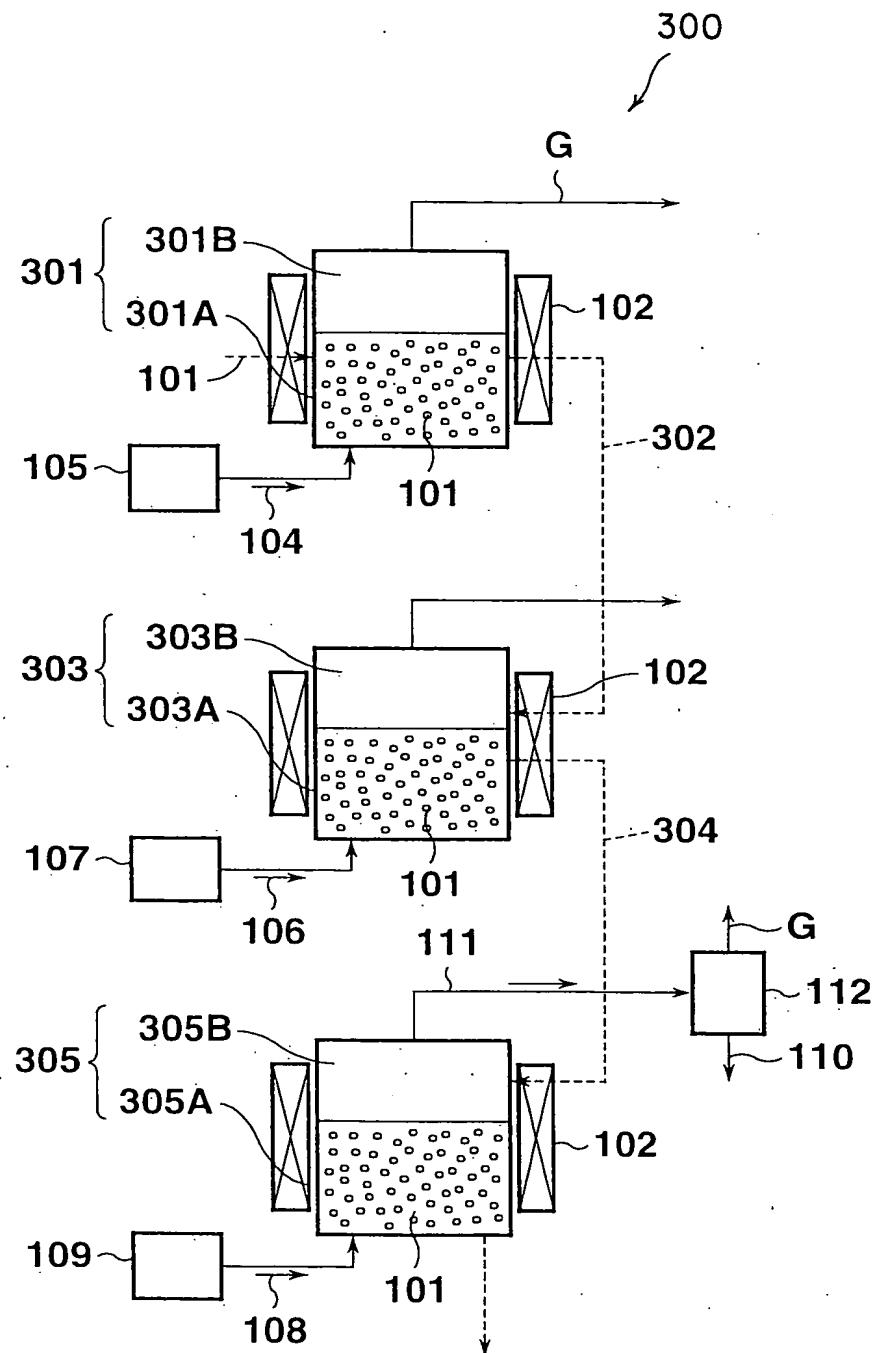


FIG. 39

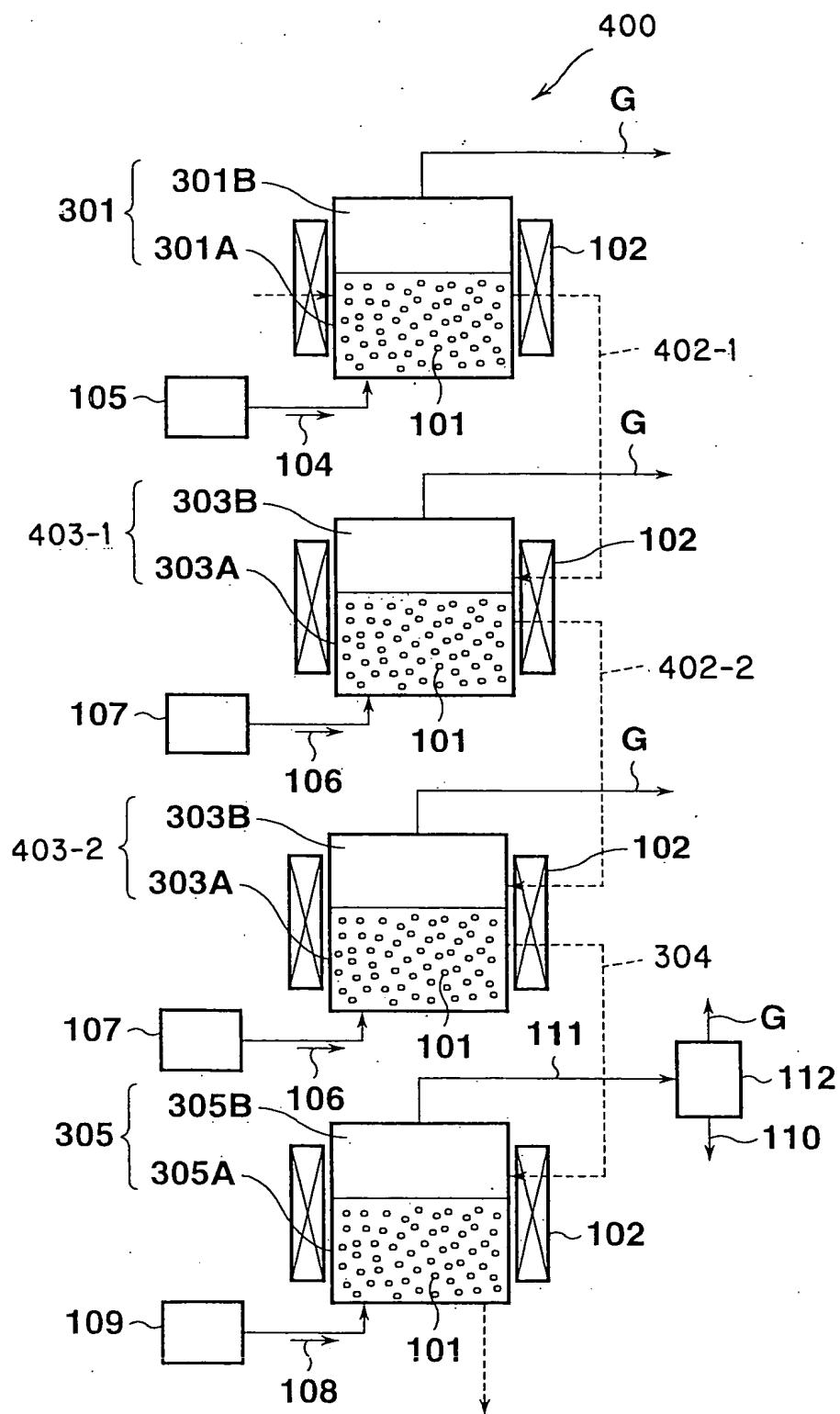


FIG. 40

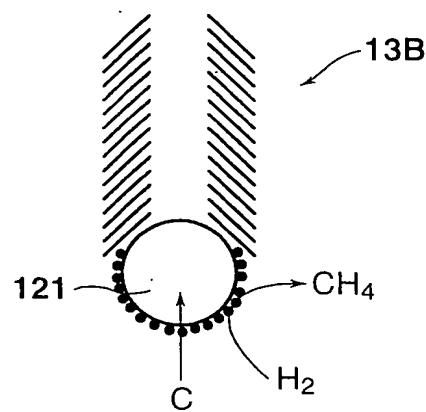


FIG. 41

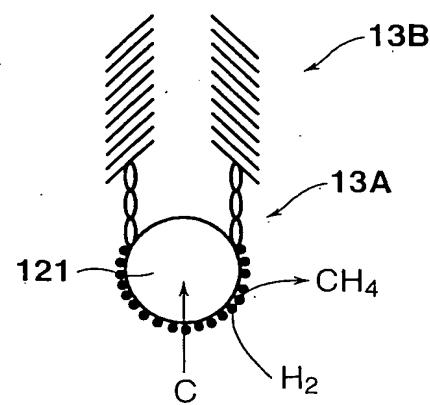


FIG. 42

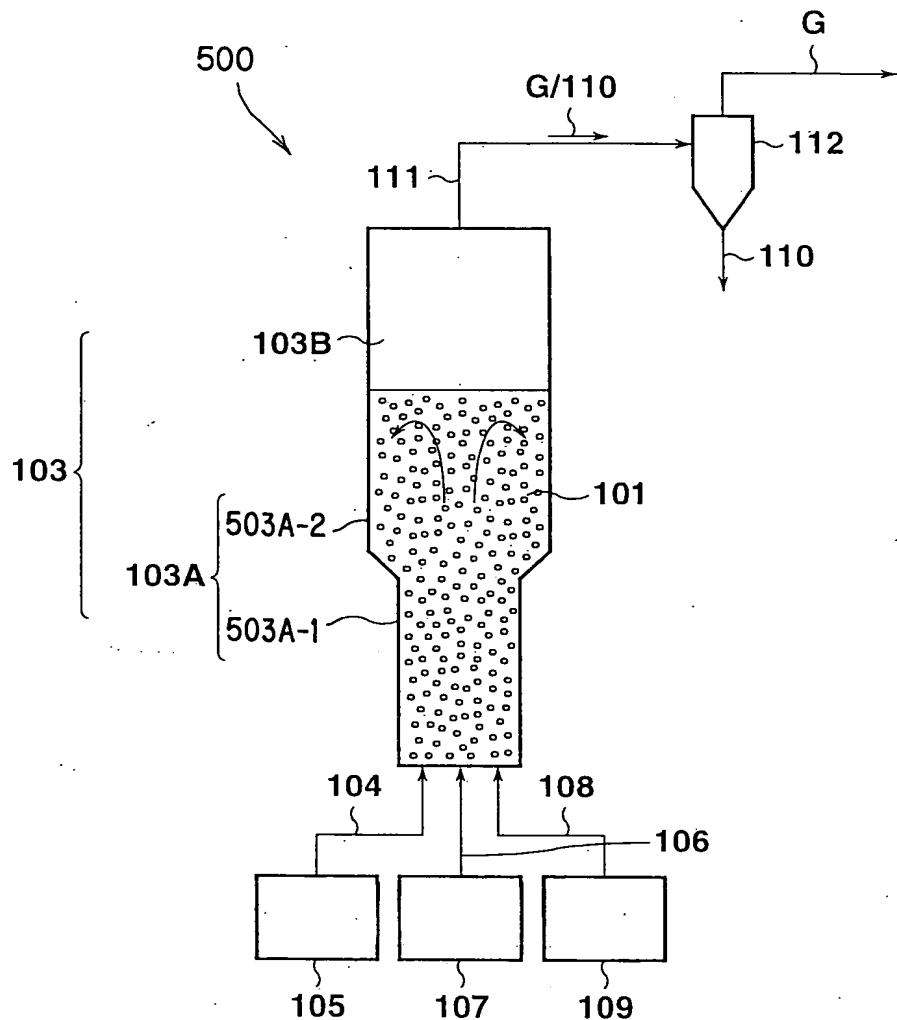


FIG. 43

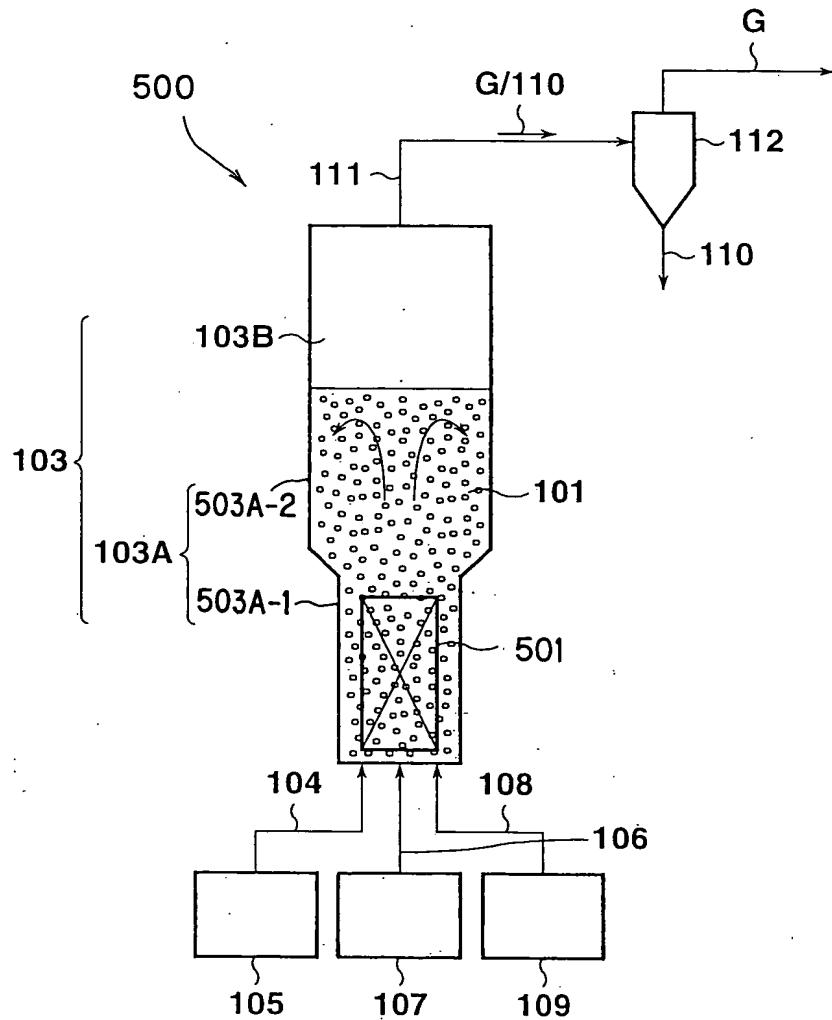


FIG. 44

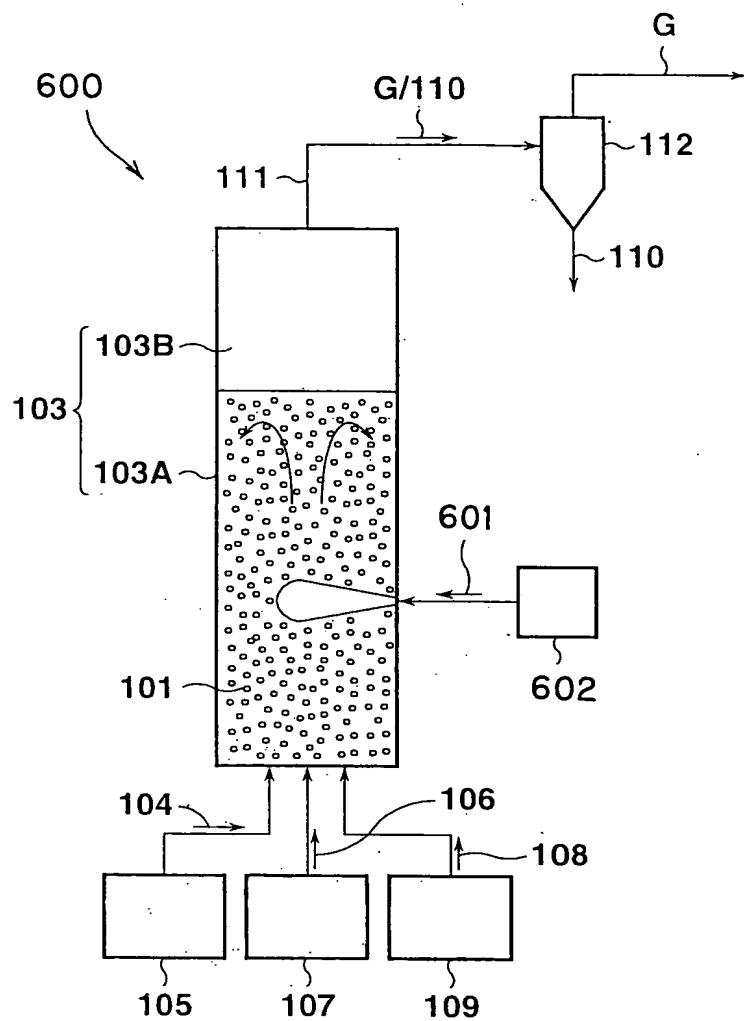


FIG. 45

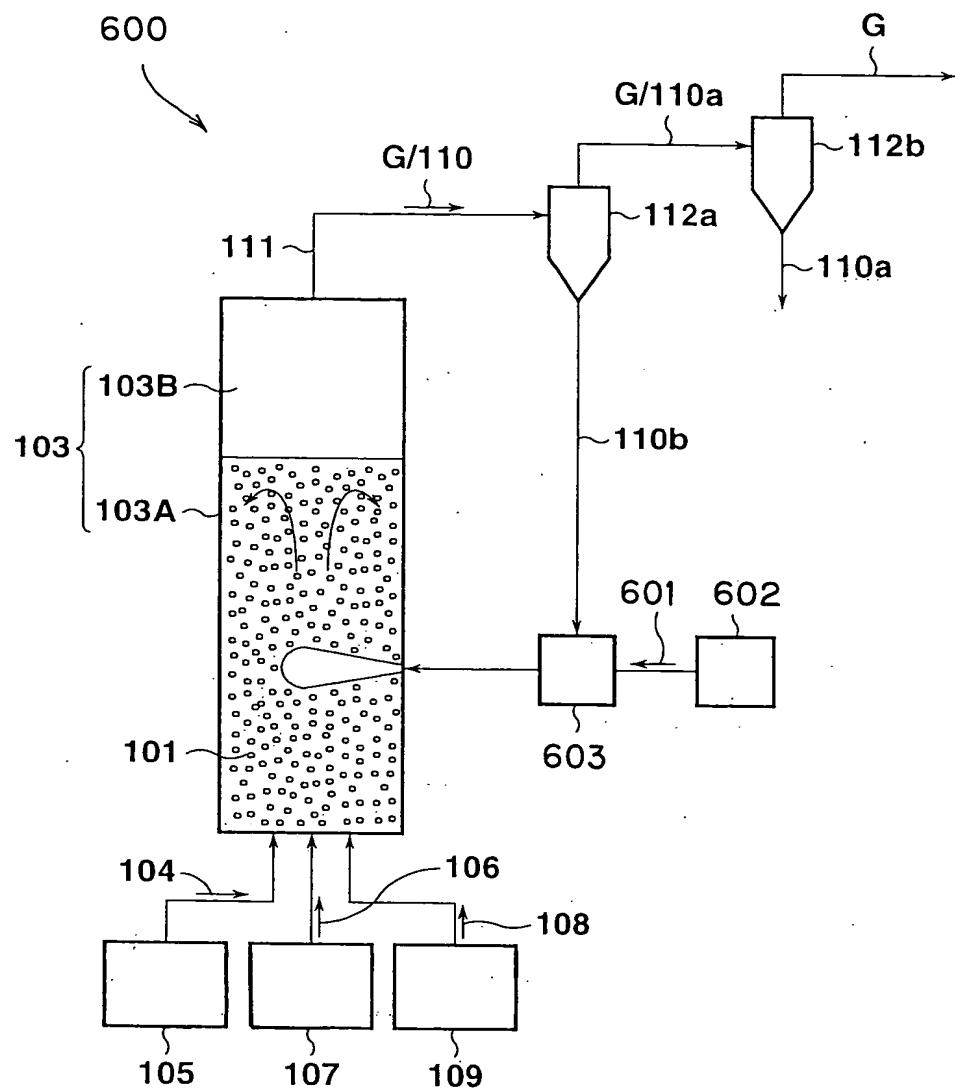
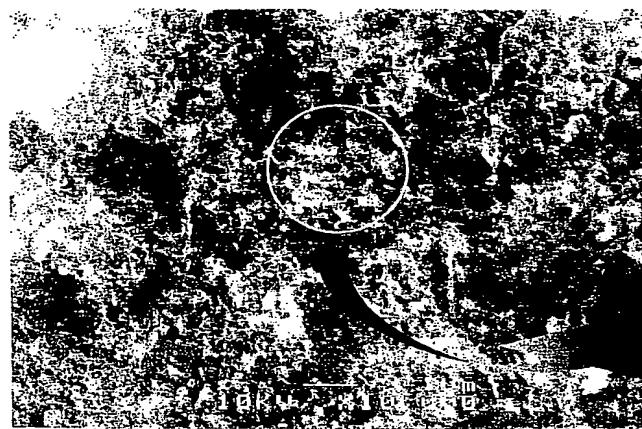


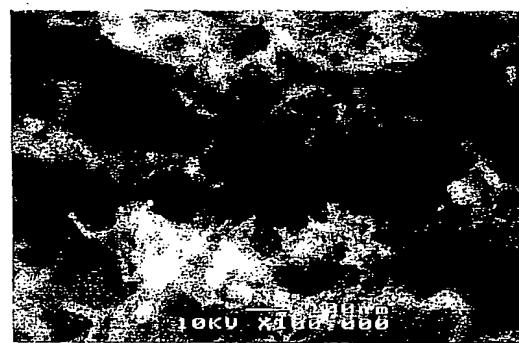
FIG. 46

(a)



— 1μm ×10000

(b)



— 1nm ×100000

10/537151

FIG. 47

(a)



— 1μm ×10000

(b)



— 100nm ×50000

FIG. 48

(a)



— 1 μ m $\times 10000$

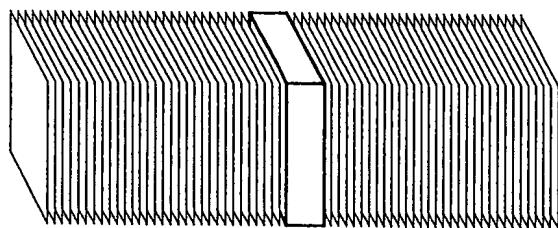
(b)



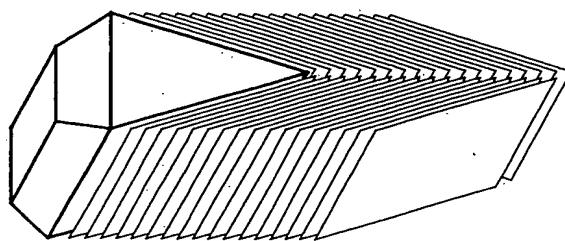
— 100nm $\times 100000$

FIG. 49

(a)



(b)



(c)

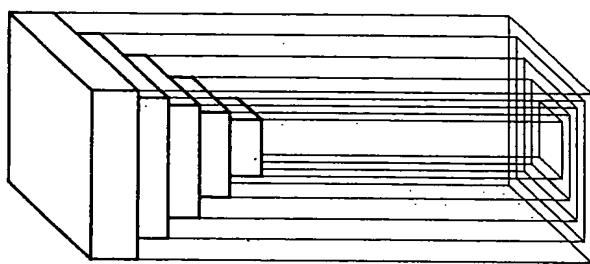


FIG. 50

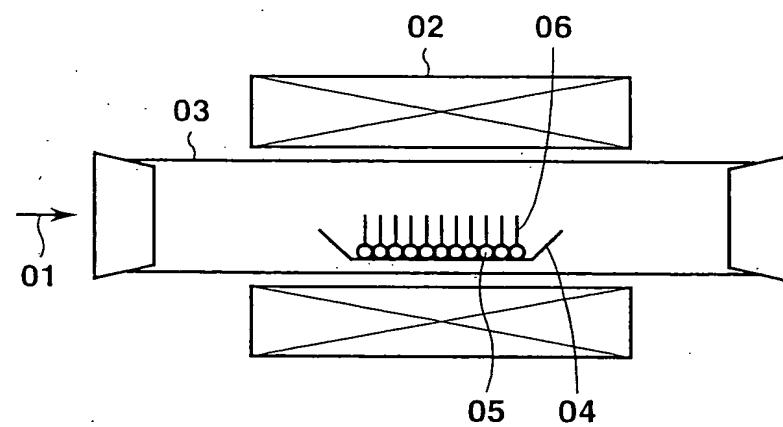
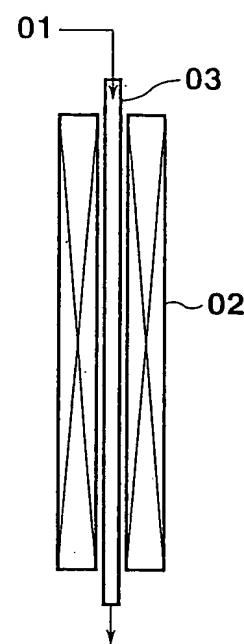


FIG. 51



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